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When this Union Pacific Railroad bridge replacement was made at Granger, Wyoming, the engineers aimed at minimum interference with traffic . . . both during installation, and in the years to come.

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The use of wrought iron for decking is accepted good practice. The plates are exposed to severe corrosive attack from refrigerator and coal car drippings, and from run-off water. They are not accessible for application of any protective coatings, and repairs are of course difficult and expensive. Only the most durable material will avoid heavy maintenance—and wrought iron is generally the first choice for the job.

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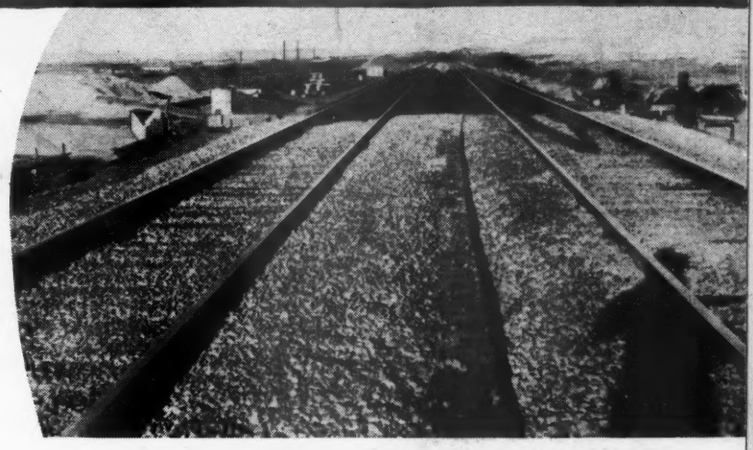
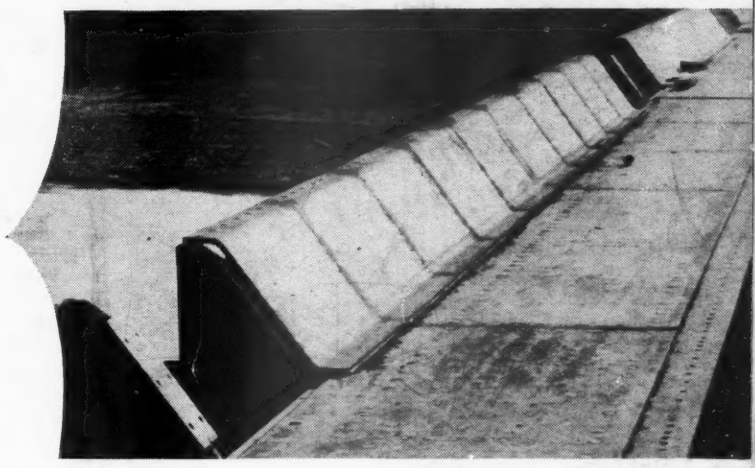
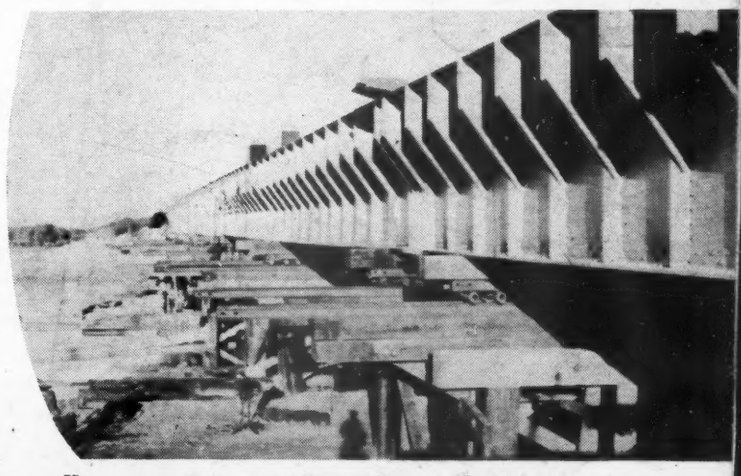


General view of old bridge. New spans, with wrought iron deck, are awaiting installation at left and right.

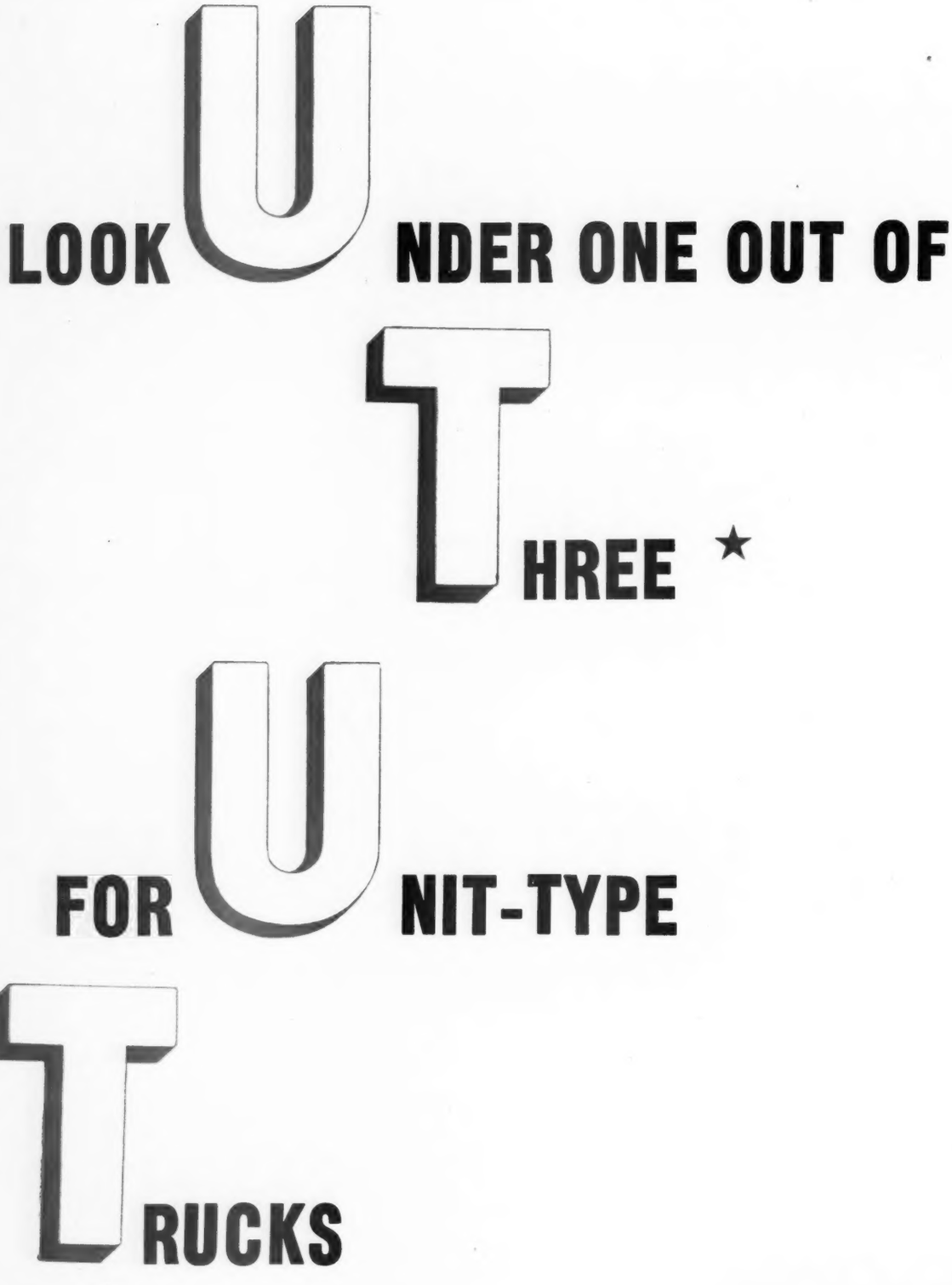


Outboard girders, which were shipped to the job in sections. Stringers and plates were applied on the job.



Here spans are supported on rollers, ready to be moved into place when old bridge spans are removed.

CORROSION COSTS YOU MORE THAN WROUGHT IRON



★ Freight cars ordered for domestic service in 1946.

Published weekly by Simmons-Boardman Publishing Corporation, 1309 Noble Street, Philadelphia, Pa. Entered as second class matter, January 4, 1933, at the Post Office at Philadelphia, Pa., under the act of March 3, 1879. Subscription price $6.00 for one year U. S. and Canada. Single copies, 50 cents each. Vol. 122, No. 14.

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Railway Age

With which are incorporated the Railway Review, the Railway Gazette, and the Railway-Age Gazette. Name registered in U. S. Patent Office.

Vol. 122 — April 5, 1947 — No. 14

PUBLISHED EACH SATURDAY BY THE SIMMONS-BOARDMAN PUBLISHING CORPORATION, 1309 NOBLE STREET, PHILADELPHIA 23, PA., WITH EDITORIAL AND EXECUTIVE OFFICES AT 30 CHURCH STREET, NEW YORK 7, N. Y., AND 105 W. ADAMS STREET, CHICAGO 3, ILL.

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Railway Age is a member of Associated Business Papers (A. B. P.) and Audit Bureau of Circulation (A. B. C.), and is indexed by the Industrial Arts Index and by the Engineering Index Service.

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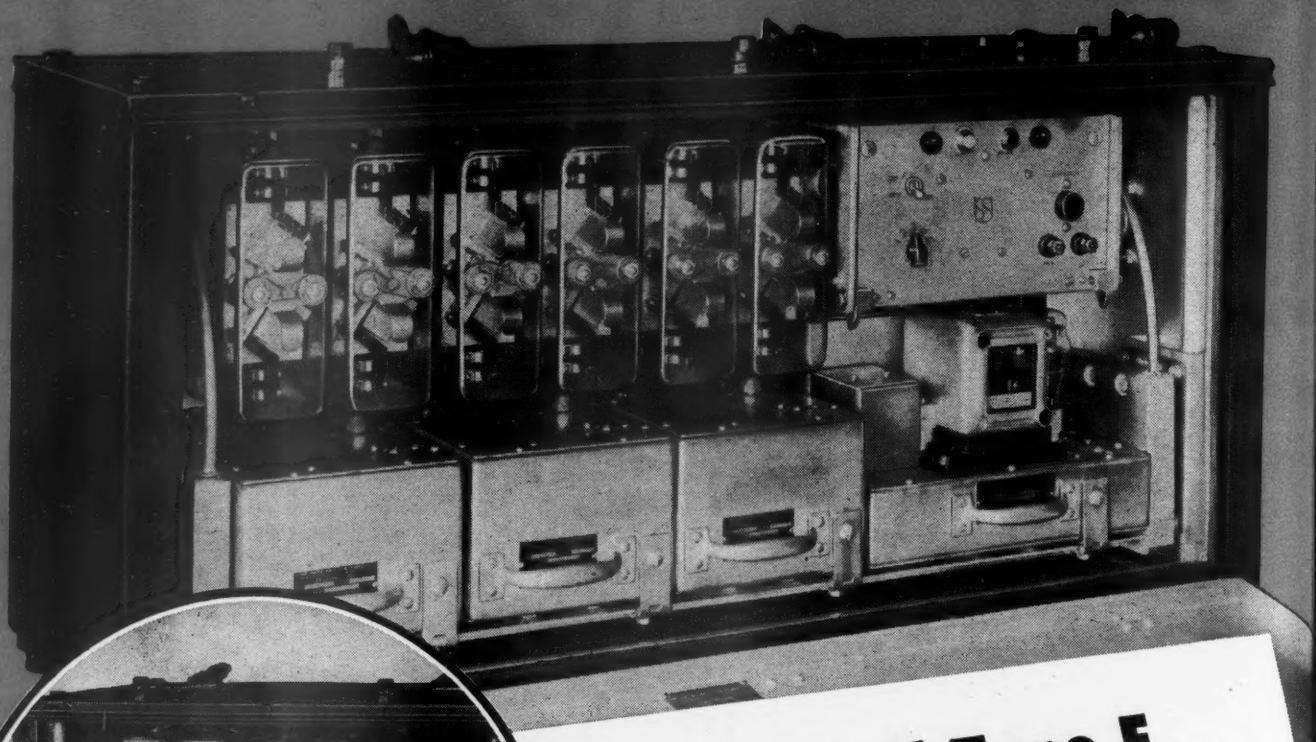

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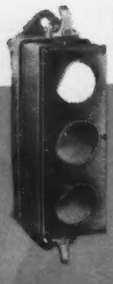

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RAILWAY AGE

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Misinforming Employees Regarding Railroad Earnings

The railway unions are now coming along with demands for wage increases, which is scarcely surprising in view of the campaign which has been carried on in the paper "Labor" to induce union members to believe that the railroads are rolling in wealth. For example, on the first page of the March 22 issue of that paper there appeared a "box" headed in large type: *"Sure, Rails Are Prospering."* The text which followed the heading did not corroborate it. On the contrary, it merely gave figures to show how the railroads substantially increased their working capital during the war years; and how one large railroad decreased its indebtedness in 1946. The text contained not one word to justify the plain assertion in the heading that the railroads "are prospering." It is a safe assumption, however, that few railroad employees took the trouble to read the statistical text, thereby discovering that the headline-writer had misinformed them. Most of them doubtless carried away the impression conveyed by the heading itself: *"Sure, Rails Are Prospering."*

The practice of ignoring or misinterpreting the actual state of railway finances when they are unfavorable is nothing new for this union paper. In its February 8 issue it published an article under the heading shown in the accompanying illustration. The text following this heading summarized a report of 1946 industrial profits taken from the magazine "Business Week." Buried far down in this text was the admission that the railroads had not shared in the 1946 upsurge of corporate earnings, but, as can be seen, that fact was not signalized in the heading. Indeed, the heading specifically states to the contrary, namely, that *all* shared in the boom. Since most readers of "Labor" cannot well be expected to read very far past the headlines in reports about corporate finance, practically all of them must have derived from their perusal of this issue the entirely false impression that the railroads are making more money for their owners than they ever did before.

STRIKES MADE NO DENT ON PROFITS, MAGAZINE ADMITS

"Business Week" Says 1946 Returns Show Greatest Earnings in History

ALL SHARED IN "BOOM"

Glowing Financial Condition Held Proof Industry Can Increase Wages

LABOR has carried several stories on the huge profits rolled up by many corporations during 1946. That LABOR understated rather than magnified the picture is shown by a roundup report on industry's fabulous earnings for the year, carried in the February 1 issue of the magazine, "Business Week."

Perhaps most significant is the agazine's admission that labo-

A statement that railroads were a "notable exception" to the big profits rule for 1946 appeared far down in the text of this article in "Labor"

The erroneous opinion as to the magnitude of railroad profits which employees might be expected to get from constant exposure to such journalistic practice was borne out by the survey of employee opinion conducted by *Railway Age* a little over a year ago, which revealed that their average notion of the rate of profit earned by the railroads in 1944 was 27 per cent, when it was actually less than 6 per cent (i. e., ratio of net income to net worth).

What kind of stewardship is it for a union paper to mislead its supporters about facts as important to them as the state of well-being of their employer? Most employees are sensible enough to know that an employer cannot pay out in wages more than he takes in; and they also understand that he has to pay taxes, to buy materials, and to pay a return on capital. Most employees can realize that a wage exaction high enough to put many of their employer's operations "in the red" would force the discontinuance of these operations; and, hence, would result in a reduction in jobs and a deterioration rather than an improvement in the situation of labor. But they will have no misgivings in making extravagant demands, injurious to their own welfare, if the labor press has persuaded them to believe that their

employer's business is vastly more profitable than it actually is.

The railroads in 1946 had profits at the rate of about 2.2 per cent (ratio of net income to net worth). Preliminary figures on profits in the manufacturing industry for 1946, published in the March issue of the monthly bulletin of the National City Bank of New York, show an average rate of profit of almost 12 percent in 1946 for such companies—about five times the ratio earned by the railroads. And railroad earnings in 1947, without allowing for any increases in wages or other costs, do not so far promise to be substantially greater than they were in 1946—certainly not much more than 3 per cent of net worth. The result is that railroad stocks are selling for less than 50 on the Dow-Jones average, compared to an average price of 175 for stocks of industrial companies. The investor has a choice—he can entrust his savings either to the manufacturing industry or to the railroads, and the comparative returns of the two branches of industry cannot occasion much doubt as to where the bulk of investment capital will go. Yet the railroads need a constant inflow of new capital to keep their services adequate and attractive—and whatever is necessary to enable the railroads to retain and increase their traffic is also necessary as "job insurance" for railroad employees.

The Idle Days of Active Cars

Elsewhere in this issue is presented a study of the relationship of two factors in freight-car utilization—the number of days turn-around time between loads and the tons per car. The article points out the need of cars in increasing the load where this is done at the expense of additional time for loading and illustrates the relationship for various carloads. The study includes a range of turn-around times between loads of from 13 days to 18 days.

Turn-around time, taken by itself, needs more consideration than it generally receives. For instance, during the last quarter of 1946, the turn-around time between carloads was 13.5 active car-days, excluding car-days surplus or under repair. The total miles traveled per car, both loaded and empty, was 717 miles between loadings. This movement at the average freight-train speed of 15.8 miles an hour required 2.2 days.

Loading and unloading time is not easy to estimate because of the effect of inactive days at the week-end on the number of calendar days a car will be in the hands of the shipper or consignee. Depending upon the day of the week on which a car is delivered, the time might vary from two or three to four or five days for each operation. The average might run as much as seven days total for both operations. Thus, the car may be in the hands of the shipper or moving in trains 9.2 days out of 13.5 days. This leaves an average of 4.3 days per loading cycle during which the car is standing in railroad yards or moving through interchanges.

It would be a matter of great interest to know all that goes on during these four days in which no road movement is made. Yard movements are ponderous and time-consuming but, allowing for that, a day for these operations for every 165 miles of road movement seems high, indeed.

No doubt, the performance on many important routes will show a better record than this, but delays anywhere which reduce the availability of cars for loading are serious under present conditions.

Assuring a Good Crop of Future Leaders

In these days of critical shortage of freight cars, rail, and other basic materials, railway managements will do well not to lose sight of another basic shortage that confronts them. This other shortage is examined in an article in this issue entitled "Railways Can Get Cream of the Crop for Future Officers, if They Will"—a report of the Committee on Cooperative Relations with Universities of the American Railway Engineering Association. The report reveals not only the serious lack that exists in the supply of recent college or university graduates in the ranks of the railroads but further discloses that there is no chance of filling this void unless the roads come forward with a plan to attract and hold such men in competition with other industries which do have plans to recruit them.

Of all the reports presented before the recent annual meeting of the A. R. E. A., as reported in the March 22 issue, none was based on more careful study, none weighed more heavily upon the committee drafting it, and none was presented with a deeper sense of responsibility and urgency. The railways, the report says, largely because of the prolonged depression of the Thirties and the recent war, are short of future key men in every department, and this at a time when "keener competition, present and future, demands active and intelligent leadership [and] the best analytical and executive minds available."

The committee laments that while the railroads have emphasized the procurement, use and conservation of materials and machines, they have largely neglected these same factors with respect to man-power of potential supervisory and managerial ability. It may have underscored the obvious when it asked: To what advantage are the finest in material things without the mind-power to direct, use and conserve them? Yet obvious things are often overlooked.

"That the railroads have been short-sighted," says the committee, "cannot be denied." That would not be so bad, if the short-sightedness were now a thing of the past, which it is not. The "cream of the crop" continues to frown on railroad employment and goes to other industries—and still no effective attempt has been made to reverse the trend.

Contrary to the early assumptions of the committee and of many other railway officers, i. e., that the colleges have been at fault—diverting their better graduates toward other industries and neglecting attention to railroad subjects—it now develops that the faculties of

these institutions turn the responsibility directly back on the railroads. They cite the railroads' apparent lack of interest, evidenced in their failure to establish systematic employment and training programs for recent graduates, in contrast to evidence to quite the contrary from other branches of industry.

The A. R. E. A. committee is agreed that the situation should and can be remedied, and sets forth in its report just what needs doing. Some of these prescriptions may be hard to take—but that is no reason for refusing them. A generation of management which fails to take whatever steps are necessary to provide a strong leadership for the industry in future is neglecting one of its most important and urgent responsibilities. The industry cannot be perpetuated as a strong, progressive business if it is to be staffed in future by leaders of less education and training for their jobs than is possessed by the leaders of other industry.

Courtesy—What Example Does Management Set?

Railroad management has been doing a good deal of much needed educational work among employees, striving to inculcate in them habits of courtesy in dealing with the public. It is still true, however, that example is more effective than unsupported precept. Do all railway officers, themselves, have the reputation of dealing with uniform courtesy with all their public contacts—especially with those who call seeking favors, or trying to sell something?

If clerks and other employees around a general office see salesmen and other callers treated thoughtlessly or discourteously by the railway officers whom they seek to interview, how much effect will management's appeals have when it urges these same employees to be considerate and polite? Anybody will be courteous to someone from whom he expects a favor. The test of genuine courtesy comes in the treatment of those who come looking for favors, rather than to dispense them.

The average employee looks on a railroad patron the way management is inclined to look upon a salesman—i. e., as somebody seeking a favor. The employee finds it hard to see how the railroad patron is doing him a good turn—which, of course, he is. But some railway officers find it quite as hard to realize that a salesman calling to sell a useful product may be just as much a gift-bearer as a cash customer seeking train space or offering some freight traffic. A primary step in inculcating courtesy on employees is for management to conduct itself similarly in all its contacts.

In the reception room of the headquarters of the purchases and stores department of the Boston & Maine there is a sign which reads: "Our suppliers are as necessary to us as our customers. We want to see you. You are entitled to a prompt interview, or a reason why you are kept waiting. Do not hesitate to call on the information clerk if you are kept waiting. Please remember the man following you."

From all indications, this simple, but effective, gesture in friendliness and courtesy is observed by all employees of the department, and is reflected in their attitude toward the public generally. It is making many friends for the B. & M. and, in turn, the railroad is being better served by callers who meet with its efficient and orderly system of guest-reception.

Circumventing Demurrage

By misuse of reconsigning privileges accorded receivers of fresh or green fruits and vegetables, some produce dealers are avoiding demurrage charges designed to encourage speedy handling of cars and, thereby, increase the availability of refrigerator equipment. In accordance with the reconsigning tariffs of the various railroads, as governed by effective service orders of the Interstate Commerce Commission, it is currently permissible to reconsign shipments of these commodities a maximum of three times. Unlike "dead" freight, which must move in a generally continuous direction if through rates are to be protected, perishables may be backhauled, without loss of the through rate, upon payment of nominal backhaul charges.

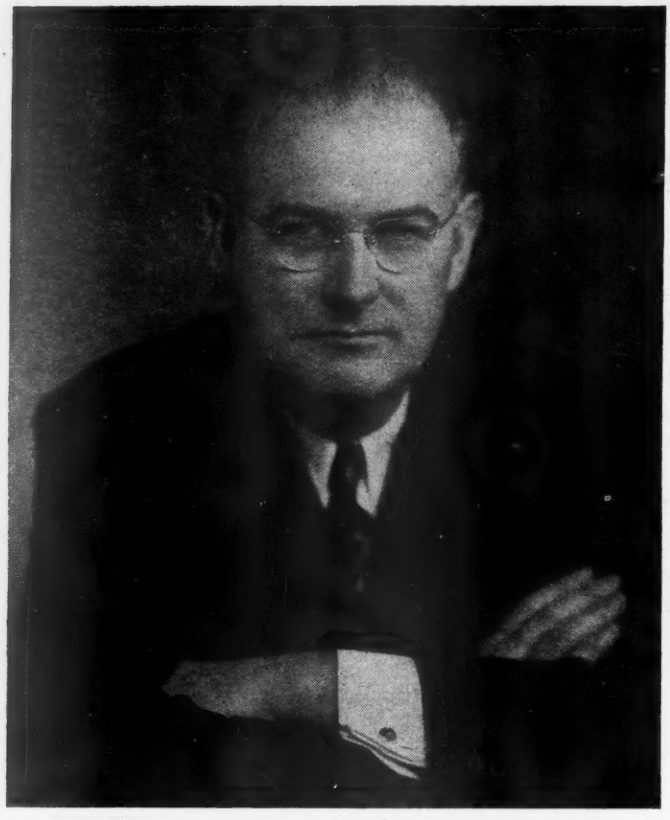
When their arrivals are "bunched," some receivers of fresh fruits and vegetables, in order to avoid demurrage charges, just prior to expiration of the 48-hr. period of free demurrage (which is also the time limit within which the car may be diverted at the through rate, in accordance with Service Order No. 396) reconsign the cars least needed to themselves at a point outside the switching limits and within a minimum mileage zone set by tariff for backhaul rates (usually 1 to 25 or 30 mi.). They incur thereby only a small diversion charge. Just prior to expiration of the 48-hr. time at the new destination, the car is reconsigned back to the same consignee at the first point, taking advantage of the low backhaul charge and additional "token charge" for the diversion. Upon second arrival at the original point, a new 48-hr. "free time" period begins.

In specific typical instances these tactics have permitted the consignee three 48-hr. free time periods instead of one, and two additional days in transit—a total of six additional free days—halving, in many cases, the demurrage charges. Still more to the point, the carrier performs additional switching and a transportation service which, net, produces nothing. The transaction has, in short, defeated the purpose of the accelerated demurrage rates and further aggravated the car shortage.

Some corrective step—a service order forbidding backhaul to a previous point of consignment or an increase in the backhaul charge within the minimum mileage zone—appears desirable to put an end to this car-wasting and expensive subterfuge.

"It should be obvious to everyone that unless the public will 'Stop, Look, Listen'—and quickly do something to remove the lopsidedness in the present public transportation policies—the privately-owned railroad industry in this country may have to throw in the towel and call it "quits." If you don't think that can happen here, take a look at what is happening now to the railroad industry in staid old England. America now has the 'last exhibit' of free enterprise in the world."

—*Ernest E. Norris, president of the Southern.*



Faricy Elected President of A.A.R.

Vice-president and general counsel of Chicago & North Western succeeds R. V. Fletcher, who will continue as special counsel for the association

WILLIAM T. FARICY, vice-president and general counsel of the Chicago & North Western, was elected president of the Association of American Railroads at a March 28 meeting of the board of directors in Washington, D. C. He assumed office on April 1 as successor to R. V. Fletcher, who has served since the death on November 12, 1946, of John J. Pelley, with the understanding that he was to be relieved as soon as a successor could be chosen. Judge Fletcher, former A. A. R. vice-president and general counsel and more recently vice-president—research, will not return to the latter position; but he will continue as special counsel for the association in the so-called Georgia and Lincoln anti-trust cases, and he will bring to a conclusion by July 1 the work of the Railroad Committee for the Study of Transportation, of which he is chairman.

Following his election Mr. Faricy held a press conference at which questions included several regarding the A. A. R. attitude toward the recently-organized Federation for Railway Progress and its chairman, Robert R. Young, who is also chairman of the Chesapeake & Ohio and Alleghany Corporation. Mr. Faricy's responses included the assertion that while the A. A. R. is "not looking for any fights," it does not propose to "run away from any fights." He added that a lot of things being said about the railroads and the association "aren't true"—they are in the category of "half-truths," being statements of a type that can be made "without taking the risk of libel suits."

Stands by Reed Bill Policy

When asked if he was referring to statements made by Mr. Young, Mr. Faricy replied that some statements made by the C. & O. chairman and the Federation for Railway Progress—"I think that's what it's called"—were of the "half-truth" variety which he had in mind. As an example, he cited the Young and federation statements with respect to the pending Reed-Bulwinkle bills to stay the operation of the anti-trust laws with respect to carrier rate-making procedures and other joint-action arrangements approved by the Interstate Commerce Commission.

As Mr. Faricy put it, Mr. Young attacked the bill after "his general counsel" [R. W. Purcell, vice-president—law, C. & O.] had supported the rate-conference features and suggested only "minor" changes, which were adopted, with respect to provisions relating to other joint-action arrangements. A questioner suggested that Mr. Purcell offered his amendments only to obtain "the best he could get" if the Senate committee on interstate and foreign commerce should refuse, as it did, to go along with his basic position that the bill should be confined to rate matters. Mr. Faricy's comment was that the bill should cover more than rate matters, it being his view that there are many

other joint-action arrangements as to which the carriers should have relief, which he emphasized would be subject to supervision by the I. C. C.

Mr. Faricy had pointed out earlier that the A. A. R. still "represents" the Young roads "to a large degree." He noted that the recent partial withdrawal of the C. & O., New York, Chicago & St. Louis and Pere Marquette left those lines participating in "some 80-odd per cent" of the association's activities. He also recalled that he had been counsel for the railroads in last year's wage case which culminated in the nationwide strike. In that role, he said, he had represented the Young roads and got from them the "same cooperation" that he got from the others.

The foregoing came in response to a question as to whether Mr. Faricy would "encourage Mr. Young to come back wholeheartedly" to the A. A. R. Another question was whether Mr. Faricy saw "any useful function" for an organization, such as the federation, representing "stockholders, labor and the public." He replied that he didn't distinguish between management and stockholders, adding that so far as the federation's "stated objectives" were concerned, the A. A. R. had "no quarrel" with it. At the same time Mr. Faricy insisted that the A. A. R. and the railroads had achieved much progress "without talking about it." He added that the wartime performance with limited equipment would not otherwise have been possible.

Wage Rise Brings Rate Rise

In response to other questions, Mr. Faricy said he subscribed "wholeheartedly" to Judge Fletcher's recent statement to the effect that railroad earnings of 6 per cent on the property investment are required to insure the maintenance of adequate service. The new A. A. R. president pointed out that the return "approximated" that figure in the Twenties, when the carriers made "all the improvements" in facilities that paid out in their wartime achievements. He added that "certainly" the railroads are entitled to a return as high as the courts have held justified in the case of public utility companies.

Mr. Faricy did not anticipate that pending air and rail fare increases would have much effect on traffic volume. It has been his observation that most travelers are still looking more to the "luxury" of the service than to its price. As to prospects for another general freight-rate increase, he said that the trend of costs will determine that matter. He went on to predict that if there is another general wage increase, there will have to be a freight-rate increase. A look at the record, he added, will show the correlation between wage adjustments and freight-rate advances—"freight rate increases have followed wage increases like night follows day."

Before the questioning began, Mr. Faricy made a brief statement, saying that he had been looking over the A. A. R. set-up and had been "impressed with the breadth and scope" of the association's activities. He mentioned, by way of examples, such activities as those relating to car service, interline accounting, patents, legislation, and public relations. As Mr. Faricy sees it, this "all adds up to quite a job," which he is approaching with "pride and humility"—"pride" in representing what he regards as the "greatest industry in America," and "humility" when he thinks of his undertaking to carry on the work of such predecessors as the late Mr. Pelley and Judge Fletcher.

As to the outlook for the industry, Mr. Faricy said he recently attended a meeting at which Charles Wilson, president of the General Electric Company, was asked, "What's ahead for business?" And Mr. Wilson replied, "Trouble." "A great industry like the railroads," Mr. Faricy went on, "need not be afraid of trouble if we tackle our problems with courage and foresight, and convince the country that it is better off with prosperous railroads than with impoverished railroads."

Meanwhile, he had assured the assembled reporters that he wanted to cooperate with the press with which, he said, his past relations had always been pleasant. He added that he was not one of those who would claim he had been misquoted if his reported remarks produced unfavorable reactions.

The new president of the association is 54 years old (Mr. Pelley was 56 when he assumed the presidency of the newly-formed association in 1934). It is noteworthy also that Mr. Faricy has spent his entire career in the West and that all of his railroad service has been with the Chicago & North Western. In the latter connection, Mr. Faricy will be the third C. & N. W. officer to be called to the presidency of the A. A. R. and its predecessor organization,—the American Railway Association. The late R. H. Aishton, who was president of the A. R. A.. from 1920 to 1933, had previously been president of the C. & N. W., and the late M. J. Gormley, who took over the office from Mr. Aishton for a two-year period, had previously been assistant to vice-president and assistant to president of the North Western.

Mr. Faricy comes to the helm of the railroads' central organization after a long and wide experience in the legal work of a large and busy railroad system, which had its share of difficulties from the competition of other forms of transportation, the impoverishment of the "granger" country during the depression and the financial difficulties arising therefrom. The new A. A. R. head played an important part in the complicated proceedings which, on June 1, 1944, brought the 8,065-mi. system out of bankruptcy—the country's third important railroad to consummate its reorganization following the depression of the Thirties. The success of Mr. Faricy in these activities was recognized by his election as vice-president and general counsel of the new corporation and his nomination to its new board of directors—the only officer of the railroad so included.

Mr. Faricy's Career

Mr. Faricy also performed outstanding services for all the carriers as their general counsel in the so-called 1945-1946 wage case, in which the brotherhoods' demands for a wage increase of 30 cents per hour were compromised to 16 cents (raised to 18½ cents after the President's intervention to end the strike of two operating unions) and withdrawal for one year of all demands for rules changes. He was one of a committee representing the railroads in the White House negotiations at the time of the May, 1946, strike crisis.

Born in St. Paul, Minn., in 1893, William T. Faricy graduated from the St. Paul College of Law and in 1914 entered railroad service with the Chicago, St. Paul, Minneapolis & Omaha (a C. & N. W. subsidiary) at St. Paul as attorney, continuing in that capacity until 1916. He then took up a general law practice in St. Paul until May, 1917, when he entered the U. S. Army, serving as first lieutenant and captain of infantry in France. Returning from military service in July, 1919, Mr. Faricy resumed his general law practice. In 1920 he reentered the legal department of the C. St. P. M. & O. as general attorney. In 1924 he was promoted to commerce attorney for the North Western, but, in 1925, again left railroad service to become vice-president of the Hauser Securities Company at Portland, Ore., and Long Beach, Cal. Mr. Faricy returned to the railroad in 1927, holding the position of Minnesota attorney, C. & N. W., until 1929, and general solicitor, C. St. P. M. & O., until 1933, when he was advanced to the position of general solicitor, C. & N. W. In July, 1942, he was promoted to general counsel of the North Western and director and vice-president and general counsel of the Omaha. On June 1, 1944, upon the reorganization of the parent road, he became a vice-president, in addition to general counsel, and was elected to its board of directors.

Modern Accounting on the New Haven

Work highly mechanized throughout; procedures under constant study to maximize reliability and improve quality of reports while minimizing cost and delay

By GEORGE T. CARMICHAEL
Vice-President
New York, New Haven & Hartford

As railroads have grown, their volume of "paper work" has increased proportionately and more than proportionately. It became apparent some years ago that old methods were unequal to the demands of changed conditions. Railroads sought ways of reducing the margin of error usually associated with all forms of human, manual effort—not only because they recognized the vital importance of accurate records involving the operation of their own roads, but also because they realized full well that no road is sufficient unto itself. Railroading is an involved business; a mistake in calculations, no matter how slight, can affect the records of many other roads with which there are constant interline relations. That is why antiquated systems of bookkeeping have had to give way to more precise methods of modern accounting.

Technological advances in the field of operations called for comparable advances in the realm of accounting—the two go hand-in-hand. What with the work necessary in handling freight and passenger revenues, interline and online operations, material disbursements, wages, inventories—and a host of other forms, reports and statements—it became a question of how to make "paper work" keep pace with the stepped-up tempo of the business.

Mechanized "Paper Work"

Accuracy, speed and efficiency were the motivating forces in seeking a practicable solution to the problem of improving the accounting procedures on the New Haven. The obvious recourse was to mechanized office equipment. Intensive research and study, in collaboration with the manufacturers of work-saving devices, developed many of the mechanical substitutes now in use in offices throughout the New Haven system.

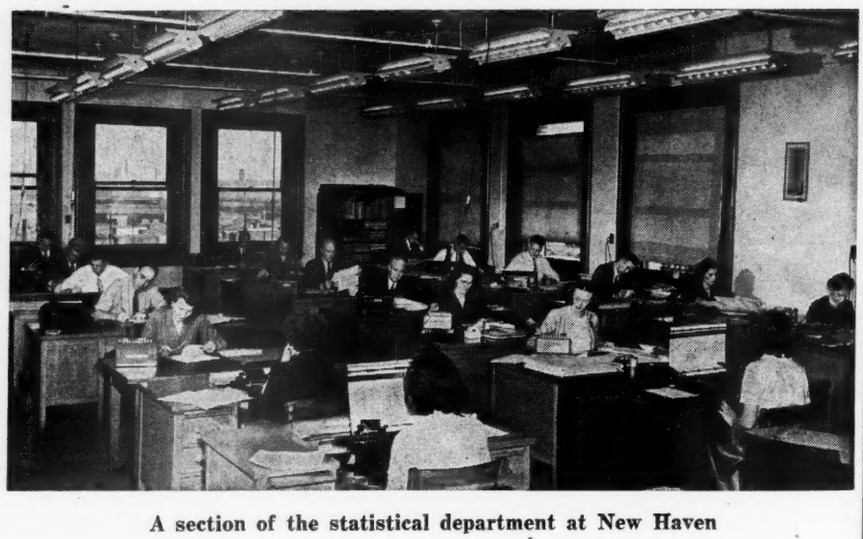
Fortunately, unification and standardization of railroad accounting had already been largely achieved, through the efforts of the Railway Accounting Officers Association, in cooperation with federal and state regulatory agencies, and a general standardization of form and descriptive content was established for station, freight and passenger accounting. The important task for the New Haven was to select and install the varied types of mechanized equipment best suited to its purposes without conflicting in any way with existing accounting practices.

Today, under competent supervision, accounting procedures are geared to keep pace with the road's multiple operations —and with the efficiency and economy made possible by modern machines and practices. This improvement has literally occurred all along the line—for example, the application of mechanics to "paper work" has simplified the detail of station agent's work to such an extent that these key employees now have more time to promote the varied services of the road and to build public good will. In the highly competitive field of transportation, this by-product of improved accounting procedures has a definite economic value.

The scope of this discussion is limited to the use of mechanized equipment in accounting procedures alone. It should be borne in mind that the widespread use of such machines extends to every department and office of the road—wherever such devices can improve and accelerate operations, and is not confined to the accounting department.

Revenue Accounting

Several years ago, the New Haven made an exhaustive study of machine application to revenue accounting—a subject of importance to all railroads, but particularly to the New Haven which serves Southern New England's industrial area and derives most of its freight revenue from interline received traffic. This involves monthly interline settlements of approximately 250,000 waybills to an average list of 325 railroads. The diversity and character of this traffic, as well as points of origin and routes, require maintaining files of approximately 10,000 division sheets of other carriers. One of the first steps in simplifying the preparation of interline freight accounts and applying divisions to interline abstracts mechanically, was the adoption of a more extensive use of punch-card accounting.



A section of the statistical department at New Haven

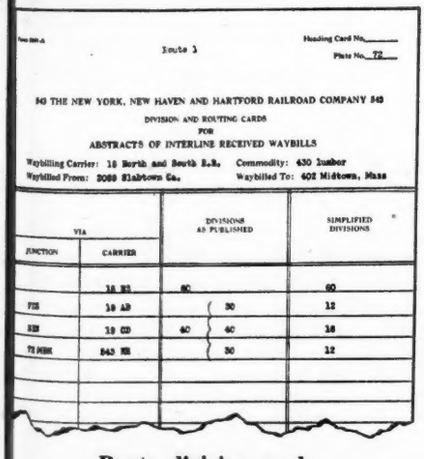
Left—A section of the punch-card accounting files at New Haven
Right—Sortergraf equipment in use

The punch-card plan of abstracting has been in operation for some time and has proved successful; so far as practicable, it will be extended to include all accounts—with the exception of a relatively small number that will always require that details be typed on abstracts, for example: traffic accorded transit privileges.

Streamlining Method

The New Haven prepares charts or route division cards—whichever is more practicable—for each origin road, by routes and by receiving junctions; each card or chart carries an addressograph plate number which has been assigned for each origin group of stations to each destination group of stations. This plate number serves as a key to the divisions applying in each case.

From the charts or cards referred to above, plate number cards are key-punched for each road in advance to show the road and plate number and those for carload traffic also show the receiving junction. Addressograph plates are then made for each plate number card, showing the plate number, the participating roads and their divisions.



Route 3

Heading Card No._____
Plate No. 72

NH THE NEW YORK, NEW HAVEN AND HARTFORD RAILROAD COMPANY NH

DIVISION AND ROUTING CARDS
FOR
ABSTRACTS OF INTERLINE RECEIVED WAYBILLS

Waybilling Carrier: 18 North and South R.R. Commodity: 430 Lumber
Waybilled From: 2089 Slabtown Co. Waybilled To: 402 Midtown, Mass

VIA		DIVISIONS AS PUBLISHED	SIMPLIFIED DIVISIONS
JUNCTION	CARRIER		
	18 NS	60	60
FIS	18 AB	30	12
NIH	18 CD	40 30	40 12
72 NHK	843 NH	30	12

Route division card

Waybill Processing

Under this plan, interline received waybills come into the audit office from destination stations on a daily, or sometimes periodical, basis; after rates are checked, a card is key-punched for each waybill; this card carries all information essential to both station and interline accounting.

Waybills are processed for interline settlement four times a month. With the use of Sortergraf equipment, the waybills are segregated as follows: carload and less-than-carload, roads, waybill number order (last three digits), forwarded and received stations—and finally by plate numbers where the volume justifies.

Waybills are arranged in route and division order for "divisions" application, and, when the volume justifies the use of folders for waybills covering the same divisions and same plate number (as in the case of less-than-carload waybills), the *folder* will bear an overall plate number in lieu of the plate number that is ordinarily shown in the upper left hand corner of each waybill. When thus prepared—plus some additional sorting of Sortergrafs — waybills are ready for matching with the corresponding detail punched cards.

Sorting and Matching

The detail cards that are key-punched from waybills are machine sorted for each period by roads, by forwarding stations, in waybill order number and are then filed awaiting matching with the corresponding waybills. This matching-up process is done at the end of each designated period in the month—when the waybills for each road are ready. It works this way: as each plate number, appearing on an individual waybill or a waybill folder, is identified, the corresponding plate number card is taken from the plate number file and placed in front of the applicable waybill detail cards. When this operation is completed, all the records are held intact in card trays—pending the completion of a similar step for the other periods of the month. In the case of less-carload waybills, covering the main route of a large road and settled on road-to-road percents, only the waybills and cards for routes *other* than the main route are matched; the cards covering the main route are filed behind the plate number applying to such route. Waybill detail cards in the second, third and fourth periods of the month are filed with the respective cards of the previous periods.

Gang-punching and Abstracting

When all carload cards have been handled as outlined, they are run through a gang-punch machine in order to gang-punch the plate numbers and received junction in the detail waybill cards; then they are sorted in numerical plate number order, the plate number cards being automatically eliminated and resorted back to the permanent file for use in a subsequent month. The less-carload plate number cards stay with the less-carload waybill detail cards until necessary abstracting has been done.

Card machine abstracting lends itself to mass production. Instead of the additional footing operation required for typed abstracts prepared daily throughout the month, the facility of the tabulator machines in handling the cards makes it possible to print all entries on each abstract in one operation and get automatic totals; it is not only fast but accurate. By this method, waybill cards are abstracted on continuous abstract forms, the I. B. M. tabulator printing the plate number and all necessary informa-

tion on each abstract; the totals are automatically controlled by the change in the forwarding and receiving stations and commodity. In the case of less-carload by plate numbers, the tabulator automatically controls the spacing for each abstract appearing on the continuous form.

The continuous abstract forms are then run through the addressograph, which prints the various divisions. The plate number printed on each abstract serves as the key to the addressograph plate showing the divisions applicable; this affords a constant check, inasmuch as the plate number taken from the waybill card or plate number card can be verified with the plate number printed on the abstracts from the addressograph plate.

After the divisions are printed on abstracts by the addressograph plates, the proportions are computed and entered. The abstracts are then ready for recapitulation. At the time abstracts are printed, abstract total cards are automatically produced. These are used for preparing recapitulations after first key-punching on these total cards the New Haven proportion, waybilling carrier proportion, and proportion of first intermediate; the balance of intermediate proportions are key-punched on "trailer" cards. These cards are useful in other ways—for instance, in the compilation of commodity statistics.

A Flexible System

The use of addressograph plates on the New Haven has greatly contributed to the speed and accuracy of preparing interline accounts. Its application on a division group to division group basis reduces the number of plates needed, inasmuch as one plate will cover the divisions applicable to different commodities from various points of origin to various points of destination via one route. It exemplifies today's practice of through billing and through rates.

The use of blank stocks of continuous abstract forms and the printing of divisions thereon as currently needed from pre-punched addressograph plates makes this really a "print-as-you-go" system; its economy and efficiency are apparent.

Mechanized card-sorting and tabulating are accurate and fast

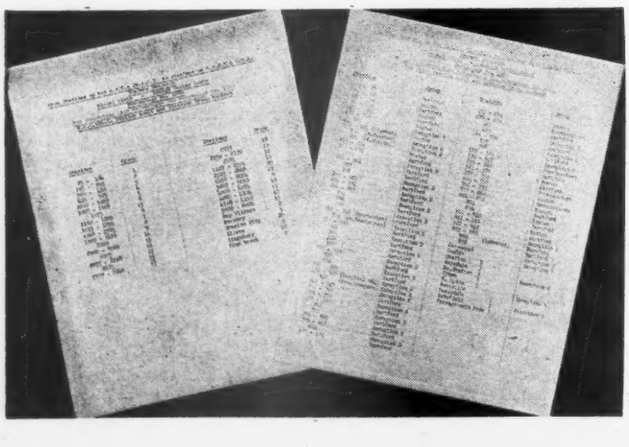
Punch-Card Plan

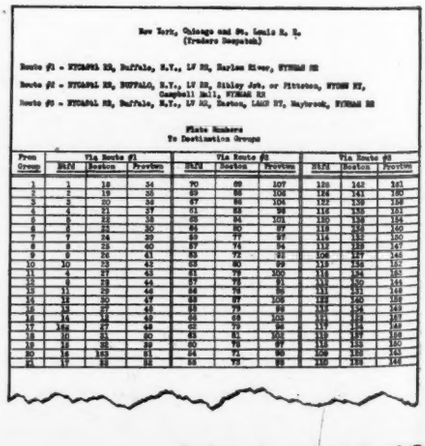
Gone are the days of station ledgers, proof sheets and other antique methods of keeping station accounts. Control of this important phase of revenue accounting is now centralized in the audit office, and records are handled entirely by a simple punch-card plan. There is only one series of received pro numbers at each station and likewise only one series of waybill numbers. Similarly, of pro numbers only one series is used at each station for all miscellaneous revenues, a different code letter denoting the kind of earning; the code letters governing the account numbers are key-punched in the cards which have been prepared from the miscellaneous bills issued. The preparation of freight bills and waybills at stations has been greatly simplified; the necessary separation between local and interline received weight, freight, advances and prepaid—as well as less-carload and carload—is now automatically accomplished by the I. B. M. tabulator, through a distinctive X punching in waybill cards.

Each station's account is based on the received waybill cards. These show the pro number and net debit or credit, the miscellaneous earnings cards, the cards covering forwarded advances and prepays prepared from waybill copies, remittance cards prepared from treasurer's lists, and cards covering all other items clearing through station accounts. Daily or periodic summary cards—automatically made from the detail cards covering the various classes of items involved in monthly journal entries—facilitate the prompt completion of station accounts and preparation of journal entries at the end of the month.

Daily Accountings

The cards showing all debits and credits affecting each station's account are filed in the audit office by classes, in pro number order. Each station renders a daily or periodic cash account to the audit office, showing balance from previous cash account, all debits for current collections and other authorized debits, all credits for remittances and other authorized credits—and the cash balance on hand. From the details supporting the cash account, the corresponding detail cards are withdrawn from the open file and tabulated to verify the cash account—and, incidentally, to remove from the open file all items cleared from





New York, Chicago and St. Louis R. R.
(Producers Despatch)

Route #1 - NYCSTL RR, Buffalo, N.Y., LV RR, Harlem River, NYCSTL RR

Route #2 - NYCSTL RR, BUFFALO, N.Y., LV RR, Sibley Jct. or Pittston, NYCSTL RY, Campbell Hall, NYCSTL RR

Route #3 - NYCSTL RR, Buffalo, N.Y., LV RR, Easton, LAKE ST, Haybrook, NYCSTL RR

Plate Numbers
To Destination Groups

From Group	Via Route #1			Via Route #2			Via Route #3		
	BLN	Boston	Providence	BLN	Boston	Providence	BLN	Boston	Providence
1	1	18	34	70	89	107	128	142	161
2	2	19	35	69	88	106	124	141	160
3	3	20	36	67	86	104	127	139	158
4	4	21	37	71	85	98	114	135	157
5	5	22	38	65	84	101	130	138	154
6	6	23	30	66	80	97	119	136	150
7	7	24	39	69	77	97	116	132	150
8	8	25	40	67	76	94	117	129	147
9	9	26	41	63	72	91	108	127	145
10	10	23	42	69	80	99	119	136	157
11	4	27	43	81	78	100	116	134	153
12	6	28	44	79	76	96	113	130	144
13	11	29	44	84	76	96	111	131	149
14	12	30	47	68	87	106	128	140	158
15	13	27	46	85	79	99	113	134	149
16	14	12	48	66	66	102	119	123	147
17	16a	47	48	62	79	96	117	134	148
18	10	31	50	63	81	101	119	137	156
19	15	32	39	60	76	97	118	133	150
20	16	16a	51	64	71	90	109	130	147
21	17	33	52	65	75	95	120	136	146

Samples of interline division charts

the account. Thus, at the close of the month, only the cards for uncollected and unadjusted items remain in the open file. These are tabulated to support each station's balance, which is prepared from the summary cards automatically. Likewise, a system balance sheet is prepared from the station summary cards—thus providing a simple yet direct control over all station accounts.

Unit Method of Reporting

With the advent of the war, the tremendous increase in the number of tickets furnished on U. S. government transportation requests presented a problem in processing such requests for government billing, and in rendering interline settlements to other carriers. Former methods proved inadequate to meet the new conditions and, after some study, a unit form of agent's report was devised to supplant the previous form of report. The use of this new unit report, due to its flexibility in handling, resulted in a simplified accounting plan in the audit office.

Unit reports showing essential data covering interline sales are prepared by agents and sent to the audit office, with government transportation requests attached accompanied by ticket stubs, at the close of each of four reporting periods each month.

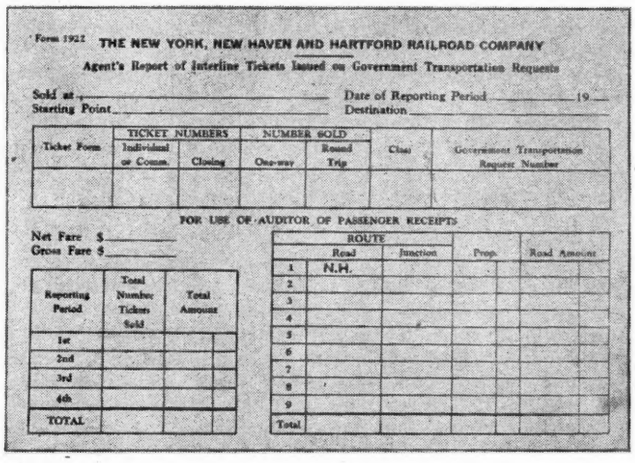
In the audit office, reports from various offices or stations located in one city covering like sales are grouped to eliminate duplications of reporting in interline settlements, reducing division work, typing and balancing previously required.

The unit reports for each period are sorted according to destinations, routes and classes, convenient for processing as one item, all unit reports for a traffic movement from one origin to one destination at one class via one route. When so grouped, the fare, proportions and other essential information are shown on the top unit report for each group, from which the fare is transcribed to transportation requests attached, and multiplied by the number of tickets to obtain the amount to enter on each request. The total number of tickets represented by the unit reports in a group is multiplied by the fare to obtain the "total amount" for a group. This information is entered on the top unit report of each group in space provided, indicating the period covered. The total of the amounts entered on transportation requests for a group can thus be verified with the total entered on the top unit report for a group, before detaching the transportation requests for billing.

Transportation requests are sorted by government departments, the total for each department ascertained and entered on the government account control sheet, the total of which must agree with the pre-determined total of the amounts entered on the top unit reports for the same period. With the period totals subdivided by departments, on the government account control sheet in agreement with the period totals of the unit reports governing the interline settlements, there is no problem in balancing.

When each period's reports have been processed as outlined, "total tickets sold" and "total amount" in each period for a "group" are recapitulated on the top unit report of the group. Road amounts are computed and entered on this top unit report and the total verified with the "total amount." Interline reports are prepared from the details on the top and underlying reports of each group, and by the use of this method it has been possible to consolidate like traffic sales to such an extent that the number of items to be divided between carriers has been reduced more than 50 per cent.

This is another instance where improved accounting procedures resulted in greater efficiency and economy by the simple expedient of reducing and controlling the "paper work."



Form 1922 THE NEW YORK, NEW HAVEN AND HARTFORD RAILROAD COMPANY

Agent's Report of Interline Tickets Issued on Government Transportation Requests

Sold at _____ Date of Reporting Period _____ 19__

Starting Point _____ Destination _____

Ticket Form	TICKET NUMBERS		NUMBER SOLD		Class	Government Transportation Request Number
	Individual or Comm.	Closing	One-way	Round Trip		

FOR USE OF AUDITOR OF PASSENGER RECEIPTS

Net Fare $_____

Gross Fare $_____

Reporting Period	Total Number Tickets Sold	Total Amount
1st		
2nd		
3rd		
4th		
TOTAL		

	ROUTE				
	Road	Junction	Prop.		Road Amount
1	N.H.				
2					
3					
4					
5					
6					
7					
8					
9					
Total					

Unit reports simplify processing U. S. government requests for interline transportation

Disbursements

The short span of twenty-five years has seen progression from hand-posting methods to manual bookkeeping machines and finally to electrically-driven bookkeeping machines in disbursement accounting. Methods of registration, indexing, filing, and housing of vouchers have similarly emerged from the antiquated to the ultra-modern. Prior to 1920, vouchers were numbered, registered, and accounts chargeable were spread by hand over the pages of a large canvas-back register, which, when opened, literally covered the top of a six foot table. In those days, vouchers were sorted according to the type of account they represented, and then were fed to the registration clerk in quantities that could be handled properly without impairing the level of efficient operation.

After registration, vouchers were turned over to the index clerk who proceeded to sort them in alphabetical sequence A to G, H to O, P to Z—as predetermined for him by the index ledgers then in use. If the vouchers were not sorted strictly in this alphabetical order—in each case using the last possible letter falling in each group—the speed and efficiency of the operation was seriously reduced by the necessity of continually turning pages.

Revisions in '20's

With the advent of account machines and other mechanized devices in the early 1920's, serious study centered on revising the entire system of accounting then existing. As a result, two "modern" bookkeeping machines were acquired and clerks were trained to operate them. At the time it seemed a revolutionary step to take, but the stepped-up efficiency and resulting economies more than justified the experiment. Later on, the original machines were replaced with electrically-driven units which registered and indexed them simultaneously. Bates machines are used for the numbering operation.

The matter of filing index cards when they were not in use was always a problem. It was inadequately solved by using about twenty alphabetical loose-leaf binders—but this was only a temporary expedient. It was the duty of the index clerk to number vouchers, sort alphabetically, extract index cards from these loose-leaf binders and turn them over to the machine operators. After indexing the vouchers, cards were returned to the index clerk, who, in turn, replaced them in the loose-leaf binders.

[*The second and concluding part of this article will appear in next week's issue.*]

Turn-Around Time vs. Average Load

A means of determining arithmetically the net effect on efficiency of car utilization of varying increases and decreases in tonnage in the car and length of loading cycle

By HERBERT ASHTON

Assistant Director, Research, the Industrial College of the Armed Forces

A GREAT deal of publicity has been given over the past several months to the failure of the railroads fully to meet the demand on them for transport services; and considerable emphasis has been placed on shortages of equipment, primarily freight cars, as an important factor in this situation. The Office of Defense Transportation has urged shippers and consignees to keep up maximum loading of equipment and release cars as promptly as possible; and the carriers themselves have been active in their efforts to increase the availability of their equipment.

In view of the efforts being made to improve the efficiency of freight-car utilization through increased loading and faster turn-around it may be of some interest to indicate certain relationships between these two factors which tend to limit the effectiveness of either when used without proper consideration of the effect of the other. Thus, car utilization is improved by increasing the load per car. Car utilization is improved also by reducing the turn-around time. But what seems to be overlooked at times is that these two measures are mutually antagonistic in some degree.

Greater Load Takes More Time

It is true that the load per car can be increased frequently without affecting the departure time or arrival at destination because of the normal lapse of time between the end of the business day or the closing hour of freight-houses and the normal time of pick up of the cars for road movement. Also when mechanical loading or unloading devices can be used it may make very little difference in the time required for these operations whether an extra ton more or less is loaded in the car. In general, however, the greater the load the more time it takes to load and unload the car. This is particularly true of box cars, and since box-car loadings represent roughly about 44 per cent of total carloadings (including l.c.l.)[1] what may apply to box-car loadings particularly should be of some interest to those responsible for making the most efficient use of the car supply. When the Office of Defense Transportation put into effect its General Order No. 1, increasing the normal l.c.l. load, it was soon discovered that the number of "holdovers" at some of the big transfer sheds increased considerably.

[1] Average of five years: 1942-1946 inclusive.

Mutual Antagonism

If this increased terminal detention resulting from efforts to increase the load per box car becomes too great the net effect will be to hurt rather than improve the utilization. On the other hand, it might pay to increase car detention at the point of origin if by so doing a sufficient increase in load can be obtained. The determination of the dividing line between the increase in load which will justify a given increase in terminal detention, and that which will not, seems of sufficient importance to warrant some attention. Accordingly, in order to provide a ready means of making this determination the table on the next page was drawn up giving the total number of carloads carried per year for turn-around times ranging from 13.00 days to 18.00 days, based on a total active car supply of 1,850,000 cars. This figure is somewhat less than the present supply, but sufficiently close for the purpose of the present analysis. A glance at the table indicates that with an active car supply (including private line cars) of 1,850,000 cars, and a turn-around time of 15.5 days, the number of carloads produced in a year would be 43,563,800. With a load of 32 tons per car the tons handled per year would be 1,394,042,000.

If the load per car were increased to 33 tons without any other change the tons handled per year would be 1,437,605,000, or the equivalent of adding 18,500 cars to the supply. The same result can be obtained by increasing the speed of movement, i.e. reducing the turn-around time of the car without changing the load. Thus, at a turn-around time of 15.5 days and a load of 32 tons per car the tons handled per year are 1,394,042,000 as indicated above. If the turn-around time is reduced to 15.0 days, with the same active car supply the number of carloads per year becomes 45,016,050 and the tons handled are 1,440,514,000. This is equivalent to an addition of 19,735 cars to the supply on the original basis of operation. These figures indicate that the efficiency of utilization would be improved more by reducing the turn-around time of the cars one-half day at this level of operation than by increasing the load per car by one ton.

Changing Effect of Car Load

On the other hand, it would not pay to increase the turn-around time by one-half day at this level of operation in order to increase the load by one ton. With a load of 20 tons, however, it *would* pay to increase the turn-around by one-half day in order to secure an additional ton of load. In fact an additional full day's delay would be warranted in this case. If the load could be increased by four tons at this level it would just be worth while to increase the turn-around time by 3 full days (from 15 days to 18 days).

Starting with heavier loads, however, the situation would be somewhat different. A half-day's delay would not be worth-while for only one ton additional load if the original load were 40 tons, and a delay beyond a day and a half would not be warranted for even a four-ton increase in load at this level. Stating the case the other way around, it would be better to reduce the turn-around time by half a day (from 15.00 days to 14.5 days) at this level than to increase the car load by two tons; and to reduce the turn-around by a day and a half than to increase the load by four tons.

Starting with a load of 50 tons and a 15.0-day turn-around, an increase in the car load of one ton provides an increase in freight carriage of two per cent. A reduction in the turn-around time of one day, however, would pro-

Carloads per year for a Given Active Supply and Varying Turn-Around Rates

No. of days turn-around time	No. of loads per car per year	Total carloads per year at 1,850,000 active cars
13.00	28.077	51,942,450
13.50	27.037	50,018,450
14.00	26.071	48,231,350
14.25	25.614	47,385,900
14.50	25.172	46,568,200
14.75	24.746	45,780,100
15.00	24.333	45,016,050
15.25	23.934	44,277,900
15.50	23.548	43,563,800
15.75	23.175	42,873,750
16.00	22.813	42,204,050
16.25	22.462	41,554,700
16.50	22.121	40,923,850
17.00	21.471	39,721,350
17.50	20.857	38,585,450
18.00	20.278	37,514,300

Note: Determination of the yearly capacity of a greater or smaller number of active cars can be derived directly from the table by interpolation.

[By multiplying the maximum total carloads per year shown in the table for a given active car supply by the average tons per car loaded the total tons which can be loaded per year can be calculated and the relative effect of changes in the carload and the turn-around time on the total utilization can be evaluated.—Editor.]

vide increased carriage amounting to 6.67 per cent. With an increase in the car load of one ton the increased volume hauled per year would be 40 million tons; but reducing the turn-around time one day would provide increased carriage amounting to 160 million tons, or roughly four times the increase provided by the added ton per car.

It is obvious from the examples considered that as the basic load increases with a given turn-around time the effectiveness of any given increase in the load per car declines compared with a reduction in the turn-around time as a means of increasing the total volume of freight carried. The converse is obviously equally true. By the same token, for a given load per car the effectiveness of a given reduction in the turn-around time increases as the basic turn-around is reduced, and conversely.

The area of doubt as to whether a reduction in turn-around time, or an increase in the load per car will be the more effective in increasing the net carriage depends, of course, on the relative magnitude of the change in load or turn-around. In the second example given above it was found that the increase in the load would just offset an increase in the turn-around time from 15 to 18 days, a 20 per cent increase. Similarly, a reduction of two days in the turn-around time from 16 to 14 days (12.5 per cent reduction) will produce the same increase in total carriage as an increase in the load per car from 40 tons to 45 tons (12.5 per cent increase) with a 14-day turn-around. The increased carriage provided amounts to 241 million tons per year in each case.

It should be noted in this connection, however, that this relationship in the effectiveness of these two means of increasing the net carriage does not obtain without restriction. Increasing the load per car from 40 tons to 45 tons will not provide a total net increase in tons carried per year of 241 million if the turn-around time is greater than 14 days, although the increase would be 12.5 per cent. On the other hand, the increase will be greater than 241 million tons with the assumed car supply if the turn-around is less than 14 days, with the same increase in load per car.

The level of operation with respect to both the load per car and turn-around time has to be taken into consideration in comparing the effectiveness of a change in either on the net carriage provided. It is also obvious, perhaps, that any given change in the turn-around time will have different effects on the total carriage provided per year depending upon the average load per car. Thus, with a 20 ton load per car, a reduction in the turn-around time from 14 days to 13 days would increase the tons carried per year (with the above car supply) by 74,222,000 tons. With a 55 ton load per car, however, this reduction in turn-around time would effect an increase in the net carriage per year of 204,111,000 tons. The increase in net carriage per year is directly proportionate to the load per car.

Method Applied to Box Cars

The above analysis has been applied to the total car supply. Application could also be made to any single type of equipment, or to the ownership of a single carrier, provided reasonably accurate information was available regarding the average load per car and turn-around time. A complete table with all the tonnage values calculated could be set up to fit any set of conditions desired both as to type and size of car supply, and for any range of load per car.

It is of some interest that for the month of January the turn-around time recorded by the Association of American Railroads for box cars was 13.17 days. The average box-car load is not known; but the average load for all cars reported by the Interstate Commerce Commission for the month of November was 31 tons. The average box-car load was undoubtedly less than this.[2] If it is assumed that 29 tons were carried per box car the number of tons that would be carried per year would amount to 564,407,899 with an active box-car supply of 702,244—which is the figure reported by the Association of American Railroads for the end of the year, reduced by the average number of unserviceable box cars. The fastest turn-around time recorded for box-cars by the O.D.T. during the war was about 12.6 days when heavy demurrage penalties were imposed for holding cars beyond the free period, and a six-day week for loading and unloading was also in effect. The average haul, however, was probably longer at that time. This was a computed figure and is therefore subject to some question on that basis.[3]

[2] L.C.L. loadings at 10 tons per car or less represent about one-third of all box-car loadings. The box-car load for 1939 was 25.8 tons as determined by the I.C.C. in Docket 28300.

Utilization Below War Level

The average load per car for box cars during the war is not available; but was probably not far from the figure used above, since the I.C.C. figure for all cars for the year 1944 was only 32.6 tons and O.D.T. General Orders No. 1 and No. 18 are still in effect. The number of box cars in service during the war was somewhat larger than that shown above for the end of last year; but for the present purpose this can be disregarded.

In view of the shortage of equipment which has existed over this period it is of some interest to determine how much of an increase in load per car would be necessary to offset the increase in turn-around time indicated. On the basis of the above supply of box cars and a 12.6-day turn-around the number of tons carried per year, with an average load of 29 tons, would be 589,935,516. In order to equal this figure with the same active car supply and a turn-around of 13.17 days it would be necessary to increase the load per box car to approximately 30.3 tons. That this aveage load per box car has been reached is doubtful; so the conclusion seems warranted that the net utilization of box cars at present is not up to the wartime level, if the turn-around computed by the O.D.T. is accurate. As pointed out above, this is subject to question.

By setting up tables similar to that described a ready check can be made of the efficiency in car utilization achieved at any given time.

[3] Computations were based on proportions of total carloadings moved in box cars as determined from car checks made by the A.A.R. in May, August and November, 1943, covering the eight commodity groupings listed in the regular weekly carloading statement.

PIGEONS GET THE "BIRD"—After 20 years of searching for effective and humane means of discouraging pigeons around the Chicago & North Western's Chicago terminal, E. C. Vandenburgh, chief engineer, has solved the problem with devices known as "pigeon repellents." They are upright U-shaped wire prongs, not unlike croquet hoops, which are fastened two inches apart on a wire frame. Mr. Vandenburgh asserts that since the place has been fortified with this "picket fence," only the "Yogi" type of pigeon comes calling.

January Buying Tops $218 Million

Purchases of materials, supplies, fuel and equipment reached new high—All categories registered substantial gains over 1946—Inventories increased almost 10 per cent—Highest since 1923

RAILWAY buying reached a new monthly high (in terms of dollars expended) during January when purchases of materials, supplies, equipment and fuel totaled $218,208,000. Comprising this total were $160,154,000 of materials, supplies and fuel and $58,054,000 of new equipment. Included in the $58,054,000 equipment total were 25 Diesel-electric locomotives, costing $15,000,000; 42 passenger-train cars aggregating $4,425,000; and 9,905 freight-train cars valued at $38,629,000.

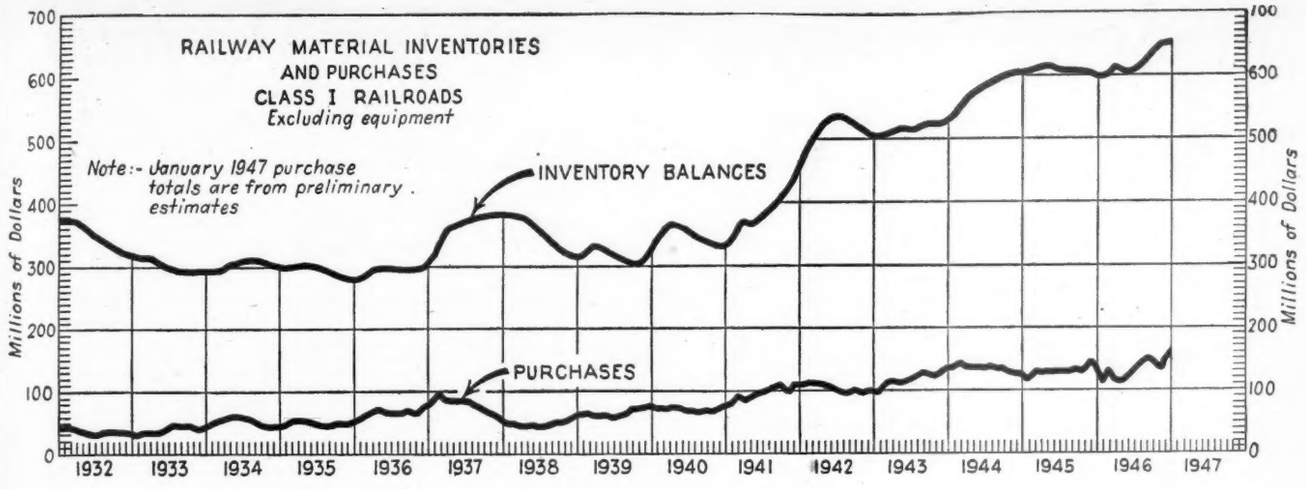
New Monthly Purchase Record

High-volume buying prevailed in the purchase of fuel, materials and supplies. According to data currently available, the total surpassed similar purchases for any comparable month. Exclusive of new rolling stock, January purchases totaled $160,154,000, according to estimates prepared by *Railway Age*, based upon special reports received from a majority of the Class I carriers. January purchases were 21 per cent greater than the $132,107,000 spent for the same purpose during the same month one year earlier; exceeded the January, 1945, total by 27 per cent; surpassed the $128,646,000 expended for similar material, supplies and fuel during the corresponding month of 1944 by 24 per cent; topped the $97,731,000 spent for the same purpose during January, 1943, by 64 per cent; exceeded the January, 1942, total, which amounted to $109,781,000, by 46 per cent; and surpassed the $79,534,000 spent for the same purpose during the comparable month of 1941 by 101 per cent.

It is significant that, while January purchases of materials, supplies and fuel increased 21 per cent compared with January, 1946, the value of materials and supplies received from manufacturers increased 26 per cent ($21,270,000). January purchases of all manufactured materials, including rails and crossties, but excluding equipment and fuel, amounted to $101,694,000. They exceeded similar purchases during 1946 by 26 per cent and topped the January, 1945, total by 30 per cent. They surpassed the $78,305,000 spent during the corresponding month of 1944 by 30 per

Photo courtesy of Caterpillar Tractor Co.

Railway buying of forest products is expected to continue at a fast pace throughout 1947, and, as indicated by the January total, crosstie purchases should surpass those of 1946 by a substantial margin



cent, 1943 ($57,848,000) by 76 per cent, 1942 ($76,930,000) by 32 per cent, and January, 1941 ($52,280,000) by more than 94 per cent.

A new January peak was also established by the $87,127,000 spent for miscellaneous materials and supplies (excluding crossties, rail and fuel) required for the maintenance of equipment, structures and track, which, for the most part, comprise storehouse stocks. This figure represents an increase of 25 per cent over similar purchases during the same month one year earlier; topped the $66,609,000 spent for this purpose during the comparable month of 1945 by 31 per cent; exceeded by 34 per cent the January, 1944, purchases, which aggregated $64,987,000; surpassed the $49,000,000 expended for the same purpose during the corresponding month of 1943 by 78 per cent; topped the $68,988,000 spent for similar materials and supplies during the same month of 1942 by 26 per cent; and jumped 92 per cent above the $45,387,000 spent for these supplies during January, 1941.

Rail Purchases Increase

January, 1947, rail purchases amounted to $8,054,000, and were higher than for any other month since December, 1945. Although the dollar value of rail purchases indicates a substantial increase over similar purchases during the same month of previous years, due to price increases made effective in recent months, actual deliveries in tons were not much greater than those of preceding comparable months.

Class I roads spent $8,054,000 for rail during January, 1947, compared with $4,830,000 during the same month last year. January, 1947, rail purchases were 40 per cent greater than the $5,734,000 expended for rail during the same month of 1945; 25 per cent more than January, 1944, purchases, which totaled $6,423,000; 67 per cent higher than the $4,811,000 spent for similar material during the corresponding month of 1943; 162 per cent greater than the $3,071,000 spent for rail during January, 1942; and 133 per cent more than January, 1941, rail purchases, which totaled $3,459,000.

Crosstie purchases, like all other categories of railway buying, exceeded similar purchases during the corresponding months, with the exception of January, 1944. Tie purchases during January, 1947, amounted to $6,513,000, or more than 12 per cent greater than the $5,786,000 expended for this material during the comparable month of 1946. They also topped the $5,601,000 spent for crossties during the same month of 1945 by 16 per cent, but slipped 6 per cent ($382,000) below the $6,895,000 expended for this purpose during January, 1944. January, 1947, tie purchases were 61 per cent greater than the $4,037,000 spent for ties during the same month of 1943; topped the January, 1942, total, which amounted to $4,871,000, by 34 per cent; and surpassed the $3,434,000 spent for similar material during the comparable month of 1941 by 90 per cent.

Class I railroads spent $58,460,000 for fuel during January, 1947, compared with $51,683,000 spent for this material during the same month one year earlier. January fuel purchases exceeded the $47,826,000 expended for the same purpose during the comparable month of 1945 by 22 per cent; topped the January, 1944, expenditure of $50,341,000 by 16 per cent; surpassed the $39,883,000 spent for fuel during the comparable month of 1943 by more than 46 per cent; exceeded the $32,851,000 expended for similar supplies during the same month of 1942 by 78 per cent; and topped the $27,254,000 spent for the same purpose during January, 1941, by more than 114 per cent.

Table No. 1—Railway Purchases, January, 1947

Equipment buying set the pace in January, 1947, but purchases in all categories topped those in January, 1946.

Equipment*	$ 58,054,000
Rails	8,054,000
Crossties	6,513,000
All other material	87,127,000
Total from manufacturers	$159,748,000
Fuel	58,460,000
Grand total	$218,208,000

* Amount placed on order.

Materials in Stock

Materials, supplies and fuel carried in stock by the Class I railroads amounted to $653,153,000 on January 1, 1947, according to reports of the Interstate Commerce Commission. This total compares with the $682,726,000 stock balance on January 1, 1923, a period which shows similarity with the present in "economic climate." However, the January 1, 1947, total topped the January 1, 1946, total of $595,759,000 by almost 10 per cent; was 8 per cent greater than the $603,638,000 stock balance on the same day of 1945; exceeded the January 1, 1944, stock total —$532,721,000—by almost 23 per cent; and surpassed the stock balance of $503,901,000 on the corresponding day of 1943 by 30 per cent. Moreover, the January 1, 1942, balance, which amounted to $460,099,000, was 42 per cent less than the January 1, 1947, balance, while inventories of $334,672,000 on the same day of 1941 were 95 per cent less than the January 1, 1947, total.

Despite the fact that the total inventory value on January 1, 1947, was greater than on any corresponding day since 1923, the ratio between inventories and purchases, as will be seen in Table 2, did not reach an abnormal level compared with other periods when monthly purchases were comparable.

According to *Railway Age* estimates, miscellaneous materials and supplies, (excluding crossties, rail and fuel) in stock on January 1, 1947, amounted to

Table No. 2—Ratio of Monthly Purchases to Inventories

For every dollar of materials, supplies and fuel purchased during the years 1922—1947, inventories ranged from $3.84 to $9.05.

January	Inventories (000)	Purchases (000)	Ratio
1922	$546,285	$133,334	4.10
1923	682,726	144,892	4.71
1924	560,049	111,921	5.00
1925	525,853	116,004	4.53
1926	551,695	129,919	4.25
1927	523,651	116,327	4.50
1928	471,078	105,945	4.45
1929	470,073	110,717	4.25
1930	430,989	86,292	4.99
1931	374,332	70,477	5.31
1932	337,335	41,532	8.12
1933	316,496	34,957	9.05
1934	291,298	46,296	6.29
1935	297,681	45,394	6.56
1936	279,919	55,666	5.02
1937	307,575	80,068	3.84
1938	385,057	54,118	7.12
1939	217,561	53,679	5.92
1940	327,236	78,088	4.19
1941	334,672	79,534	4.21
1942	460,099	109,781	4.19
1943	503,901	97,731	5.16
1944	532,721	128,646	4.14
1945	603,638	125,770	4.80
1946	595,759	132,107	4.51
1947	653,153	160,154	4.08

$475,315,000, a drop of 1.3 per cent below the December balance, which aggregated $481,567,000. Moreover, the January 1, 1947, supply was 9 per cent more than the $435,326,000 supply on hand on the same day of 1946, and was 8.6 per cent above the January 1, 1945, total, which amounted to $437,575,000. Stock balances at the beginning of 1947 topped the $382,566,000 supply on hand on the first day of 1944 by 24 per cent; were 27 per cent greater than the January 1, 1943, balance; 40 per cent more than the balance on the corresponding day of 1942; exceeded the January 1, 1941, stock balance by 122 per cent; and topped the $195,104,000 stock of miscellaneous materials and supplies on hand on the same day of 1937 by 144 per cent.

Crosstie inventories on January 1, 1947, established a new peak when they reached $82,843,000. This total was 2 per cent greater than the $81,154,000 supply on hand on December 1, 1946; it topped the January 1, 1946, balance ($72,519,000) by 14.2 per cent; surpassed the January 1, 1945, stock $72,434,000) by 14.3 per cent; exceeded the $67,964,000 tie inventory on the comparable day of 1944 by 22 per cent; topped the January 1, 1943, crosstie balance by 56 per cent; and surpassed the January 1, 1942, supply, which amounted to $48,426,000, by 71 per cent.

Although the January, 1947, fuel stock was almost 3 per cent greater than the December 1, 1946, balance, it sagged 2 per cent below the January, 1946, balance. Moreover, the January, 1947, fuel stock was 14 per cent below the supply on the corresponding day of 1945, but topped the January, 1944, stock by 1 per cent; exceeded the supply on the same day of 1943 by 7 per cent; surpassed the January 1, 1942, balance by 27 per cent; and topped the $24,780,000 supply on hand on the comparable day of 1941 by almost 105 per cent.

Rail in stock on January 1, 1947, amounted to $30,269,000, compared with $25,929,000 on December 1, 1946, and $24,840,000 on January 1, 1946. January 1, 1947, rail inventories also exceeded the $24,292,000 on hand on the same day of 1945 by 25 per cent; topped the January 1, 1944, balance of $22,342,000 by 36 per cent; surpassed the $18,131,000 supply on January 1, 1943, by 67 per cent; exceeded the January 1, 1942, supply, which totaled $23,986,000, by 26 per cent; and surpassed the $26,026,000 balance on the same day of 1941 by 16 per cent.

Scrap inventories on January 1, 1947, amounted to $13,998,000, the highest point reached by this commodity since April 1, 1945, when it amounted to $15,345,000. The January, 1947, scrap balance was 15 per cent above the December 1, 1946, total and 24 per cent above the January 1, 1946, scrap supply.

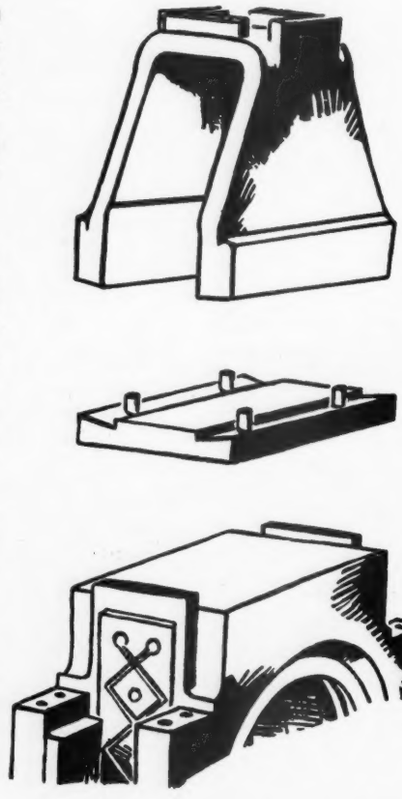
Furthermore, the $13,998,000 scrap balance on January 1, 1947, exceeded the balance on the corresponding day of 1945 by 38 per cent; topped the January 1, 1944, total by 45 per cent; surpassed the $9,805,000 supply on hand on the same day of 1943 by 43 per cent; exceeded the $8,808,000 supply on January 1, 1942, by 59 per cent; and was 23 per cent greater than the $11,371,000 supply on the comparable day of 1941.

Frame-Guided Spring Saddle

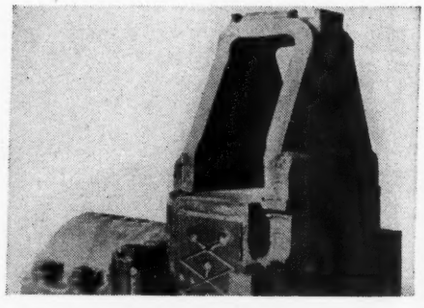
A frame-guided spring saddle has been designed to prevent the failure of locomotive spring rigging and to give smooth action on curves. With this design, developed by the Franklin Railway Supply Company, 60 East 42nd street, New York 17, the driving boxes are free to slide laterally under the saddle plates as they follow the axle in its lateral motion, while the saddles themselves and the springs and rigging are held in strict alinement with the locomotive frame. The saddle is applicable to either roller-bearing or plain-bearing boxes, and to new or existing locomotives.

The driving boxes are connected in pairs by a suitable housing and move in unison with the axle. The top of each driving box is provided with a flat bearing surface which supports a saddle plate.

While free to move laterally in relation to the box, this plate is prevented from moving longitudinally by guides at the front and back of the box.



The three parts of the frame-guided spring saddle are, from top to bottom, the spring saddle, the saddle plate and the hardened bearing surface on the driving box



The Franklin frame-guided spring saddle

The spring saddle rests on the saddle plate and a fixed relation between the two is maintained by tapered seats and locating dowels. The saddle closely straddles the locomotive frame and is free to move up and down with respect to the frame, but cannot rock or move laterally.

The sliding surfaces on the driving box and on the saddle plate are hardened, and provision is made for lubrication. Hardened plates are attached to the frame between the saddle legs to prevent wear at this point.

Photo courtesy Rensselaer Polytechnic Institute

Many engineering graduates are in the making, and the railroads can have their share if they are willing to offer the proper inducements, in competition with other industries

Railways Can Get Cream of the Crop for Future Officers—if They Will

Engineering group sees need for bolstering ranks with young college graduates, and real prospects for obtaining such men if the railroads will adopt successful practices of other industries*

DURING the past five years, the Committee on Coöperative Relations with Universities of the American Railway Engineering Association has considered many phases of the relationship between universities, engineering graduates and railroads, placing its principal effort on the determination of the basic conditions responsible for the failure of the railroads to attract recent engineering graduates to railroad service.

Originally, the investigation appears to have been predicated on the assumption that the universities were basically at fault and that their curricula should be revised to place greater emphasis on railroad engineering subjects, thereby tending to make the student more railroad-minded in choosing his career. As developed by the committee, however, the consensus of university faculties places the responsibility directly on the railroads, as evidenced by their failure to establish aggressive and systematic employment and training policies for recent engineering graduates, in contrast to the evidence of such interest by other branches of industry, has largely eliminated the desire on the part of the student to seek railroad employment. The universities further contend that when the railroads recognize the need for engineering graduates and are willing to employ them on a competitive basis with other industries, and to give them the same opportunities and consideration as do competing industries, the schools will produce them, suitably trained and in sufficient numbers to meet the requirements of the roads, and the former flow of students to the railroads will be resumed. The investigations of the committee in large measure place on the railroads the responsibility for their failure to attract engineering graduates to railroad service.

Past Employment Practice

Prior to World War I the railroads were in the front ranks as employers of civil engineers. Many engineering students and graduates sought railroad employment annually, and the problem of seeking engineering employees did not exist. Following World War I, sanitary and highway engineering and industry in general forged to the front and took many of the newer graduates, but the number still seeking railroad employment was adequate. The voluntary

* From a report of the Committee on Cooperative Relations with Universities of the American Railway Engineering Association, presented before the annual meeting of the association in Chicago on March 18. The report was prepared by a subcommittee, of which C. H. Mottier, vice-president and chief engineer, Illinois Central System, was chairman.

"It is evident that on most railroads there are few engineering employees in the age brackets which normally would have been employed within the past two decades, and that replacements for many of the men to be retired within the next 10 or 15 years are still to be found. The problem, therefore, is particularly critical at this time. That the railroads have been shortsighted cannot be denied."

"The question of a starting salary is important. It is difficult for many chief engineers, and those responsible for the fixing of employee rates, to disassociate the initial rate to be paid an engineering graduate today from the $40 to $65 per month which they were glad to get when they started on the road to 'fame and fortune' many years ago."

recruiting plan still met the immediate needs of the times.

At the beginning of the depression many railroads had the largest engineering departments in their history, employed largely without a systematic recruiting program. The depression forced most railroads to reduce drastically their engineering departments and, in many cases, all or a major part of the younger graduates were laid off in recognition of the principle that length of service should be recognized in force reductions. Because of poor earnings, the need for strictest economy, and the absence of large construction projects during the depression and the later Thirties, the railroads in general did not rehire or replace the laid-off younger engineering employees. Largely as a result of these conditions, the interest of University graduates, and of the universities themselves, waned, and many institutions dropped their specialized railroad courses.

When increased activity and earnings of the recent war period demanded the employment of additional engineers, very few were available. Enrollments in engineering colleges were greatly reduced and those who graduated were absorbed immediately by the war effort, either in war industries or by the military forces. The railroads now realize that their lack of aggressive plans for the employment of young graduate engineers, in contrast to the employment and training plans of competing industries, has largely eliminated the student's interest in railroad employment, and that prompt and aggressive action will be required to reverse the flow.

As a result of the curtailment of work and employment during the depression years and the acute shortage of young engineers during the war years, only those few railroads which have continued their well established and well organized programs of seeking college trained men have secured replacements in the lower brackets of engineering employment. It is evident, therefore, that on most railroads there are few engineering employees in the age brackets which normally would have been employed within the past two decades, and that replacements for many of the men to be retired within the next 10 or 15 years are still to be found. The problem, therefore, is particularly critical at this time.

That the railroads have been shortsighted cannot be denied. It is evident that there is a shortage of competent key men for replacements and the period available for training is brief. The problem is further complicated by a change in requirements. The period of railroad construction with its successive periods of expansion and contraction has been superseded by a competitive era requiring greater efficiency and leadership.

Better Selection Necessary

The college graduate has survived many screenings, given at the time of matriculation and during his college course. From this the railroads may benefit, provided a further screening is effected at the time of employment for adaptability to railroad work and the human qualities of personality, character and other moral and mental attributes. The pregraduation screening by the colleges and universities, together with additional screening by the railroads to fit their specific requirements, will do much to eliminate misfits which previous run-of-the-mill methods have produced.

In addition to the requirements of the engineering departments, and for similar reasons, a critical need exists for trained supervisory officers in other departments, which properly-selected, engineer-trained employees are qualified to fill, as is attested by the high percentage of civil engineers among railroad presidents and operating department heads.

Keener competition, present and future, demands active and intelligent leadership. Stricter regulation by government agencies and subsidization of competitors demand the best analytical and executive minds available. Engineering education and training provide an excellent foundation to meet such needs.

Opportunity for Orientation

The employment of young engineering graduates initially in the engineering department offers an excellent opportunity for orientation in the railroad industry and for use of the new employee's education and talents during his period of orientation and training the period when it otherwise would be difficult to justify his employment, not only gives the employee an opportunity to become accustomed to his new environment, and to show his aptitude for railroad service, but also provides a period of observation by the railroad in order that he may be employed to best advantage, and thereby avoid the risk of trying to fit a square peg in a round hole.

Of the 31 large railroads studied in 1940, 76 per cent of the mileage was headed by college graduates, 36 per cent being headed by graduate civil engineers. The Pennsylvania and the Southern for many years have followed systematic programs of employing technical graduates for training as supervisory officers. It was reported in 1945 that of 85 graduates of the Southern's training plan who were then in the employ of the Southern, most of whom were college graduates, one was a vice-president, one a general manager, nine were division superintendents, seven were division roadmasters, one an assistant division superintendent, seven were trainmasters, and 59 were in other official and supervisory positions.

Adequate Means of Employment

With the need for prompt employment of specially selected engineering graduates clearly established, there remains the second phase of the committee assignment—the necessity of providing adequate means for employing and retaining new technically trained employees. The problem is complicated by a belief among both engineering faculties and students that railway service offers little or no opportunity for

a successful career, with the result that very few engineering graduates seek railroad employment.

A review of conditions which brought about this belief and the resulting lack of interest, mentioned previously in this report, explains why some railroads have not sought such graduates aggressively, preferring to employ those who came to them voluntarily. During the same periods many other industries have set up elaborate training programs, have interviewed eligible students regularly and have carefully selected those who fit their needs. In many cases they have offered starting salaries well in excess of those offered by the railroads, and in most cases they offer systematic training. For those who can qualify they offer regular promotion into management assignments and a successful future.

While the lack of extensive railroad construction and reconstruction may have removed some of the romance and glamour which at one time was associated with the railroad engineer, it is not believed that this loss is critical. The graduate today is intensely practical. He realizes that expansion of railroads may be over. He is not so much concerned about that as he is with his own opportunity for a successful future. That future, so far as he is concerned, is materially improved by the acute shortage of engineering employees in the middle age group and by the opportunities which many railroads offer to qualified engineering employees for advancement through the operating and other departments.

Must Have a Plan

The outstanding record of the railroads during the war period has won the admiration of all and has convinced the thinking public that the railroads still have an important place in our American economy which no other industry is competent to fill. The philosophy of despair has gone, and in its place is a feeling of optimism and confidence. These facts, properly presented to both faculty and students, will revive their interest in the railroads. This, however, will not be enough. A definite plan should be established for the employment, training and development of the graduate.

The engineering graduate today is concerned with both the prospects for a successful future and the starting salary. He is interested in experience only if it leads to a future, and is not too easily sold. The first step, then, is for each railroad to adopt a definite program involving the following principal items:

(1) An aggressive employment policy which seeks graduates with certain specific qualifications, as opposed to a policy which merely employs those who voluntarily seek railroad employment. The former policy may secure the "cream of the crop," whereas the latter may merely employ those who have not been sought and who are, therefore, forced to seek employment.

(2) A progressive and definite training plan covering selected phases of railway engineering, thereby preparing the new employee for as rapid advancement as his ability merits.

(3) A starting salary for new, technically-trained employees as high or higher than that offered by competing industries, with a graduated system of increases to maintain interest during the training period, and to insure his retention on the railroads.

(4) An assured future, commensurate with the employee's ability, through a definite plan of advancement into management positions, not limited to the engineering department.

Contacts and Follow-ups

Following the adoption of such a program, the engineering personnel officer of the railroad, or his designated representative, should meet the personnel directors of selected engineering colleges to explain the program, the initial and long-range requirements of his road, and the opportunities offered by his company to attract and retain the services of promising young engineers. He should consult freely the personnel director, as well as leading members of the faculty, concerning the qualifications of prospective employees, and should interview personally those who meet his requirements. The initial interest aroused, the contacts should be developed by conferences and interviews as frequently as occasion may justify, with a view to actual employment, well in advance of graduation.

The employment of students and instructors during summer vacations will also be helpful. The employment of university instructors affords an excellent means of creating a more friendly and sympathetic attitude on the part of university faculties towards the railroads.

Railway engineering officers and their specially qualified assistants should welcome opportunities to speak before college groups on subjects of interest to the college student preparing for an engineering career. Talks on new construction are always popular, but any subject having a definite bearing on the student's future success in his chosen profession will create surprising interest. Well-written articles on railroad subjects in engineering publications offer an excellent medium for creating a desire for railroad employment.

The question of a starting salary is important. It is difficult for many chief engineers, and those responsible for the fixing of employee rates, to disassociate the initial rate to be paid an engineering graduate today from the $40 to $65 per month which they were glad to get when they started on the road to "fame and fortune" many years ago. The following information on salaries of engineers, quoted from a report of the Engineers' Council for Professional Development (a conference of engineering bodies with offices at 29 West 39th street, New York,) is of interest in this connection.

At the request of a group of deans of engineering, a questionnaire was sent to 200 manufacturing, utility and railroad companies on May 1, 1946, to secure information relative to the salaries being paid recent engineering graduates. Seventy-five questionnaires

"Keener competition, present and future, demands active and intelligent leadership. Stricter regulation by government agencies and subsidization of competitors demand the best analytical and executive minds available. Engineering education and training provide an excellent foundation for such needs."

"The outstanding record of the railroads during the war period has won the admiration of all and has convinced thinking people that the railroads still have an important place in our American economy. . . . — The philosophy of despair has gone. . . . — These facts, properly presented to both faculty and students, will revive their interest in the railroads. This, however, will not be enough. A definite plan should be established for the employment, training and development of the graduate."

Results from Questionnaire on Starting Salaries for Recent Engineering Graduates

	Salary Per Month		
	Low	Average	High
For inexperienced graduates (68 returns)	$150	$206	$261
For inexperienced graduates with Masters' degree (56 returns)	150	229	288
For graduates with three years of satisfactory experience:			
Bachelors' degree (53 returns)	200	275	350
Masters' degree (44 returns)	225	303	450
For graduates with five years of satisfactory experience:			
Bachelors' degree (48 returns)	250	328	450
Masters' degree (39 returns)	250	356	462

were returned, and the results appear in the accompanying tabulation. In many instances the information given for a particular classification was the starting salary for a new employee in that classification.

In recognition and furtherance of the primary object of the selection and training of young college graduates to fill assignments, the same care used in the selection of the employee should be continued throughout his training period. The importance of proper orientation, not alone of the employee, but of his supervisors and associates as well, cannot be overestimated.

Plan Must Be Explained

All persons responsible for or associated with the training and development of the new employee should be thoroughly indoctrinated with appropriate details of the plan of training in order that all persons may be sympathetic and may exert every effort to promote its success. The importance of the plan to the future of the railroad should be explained carefully to all persons involved lest older employees, who have justified their employment on the basis of service but who have not had the opportunities of higher education, create friction in the organization.

The new employee should be given every reasonable protection and consideration during his training period, but he should not be pampered. A feeling of security and of enthusiasm for his assignment should be developed and maintained. His training should be broad and should include an appropriate period on each type of work in which he is to be trained. He should not be left in one assignment long enough to become stagnant. He should complete his training before assignment to a permanent position.

At the completion of his training period he should be given good orientation advice prior to his reporting to his first permanent assignment. He should be reminded of the investment which the railroad has made in his future, with the expectation that he would profit thereby, and hence be a more valuable employee to the railroad. He should be reminded also that his future depends largely on his ability to work with others, on his initiative and on his ability to produce results appropriate to his position.

Consistent with his ability, he should be promoted in the engineering department, and opportunities for promotion in other departments should be sought constantly to permit a constant flow from the training period into management positions, thereby benefiting the entire railroad and, at the same time, keeping his promotion incentive alive.

While we are primarily interested in the employment of engineering graduates and in their advancement as outlined, it is recognized that college graduates from other than engineering schools are well qualified by their training for railroad employment and subsequent advancement into management positions.

More men than can be assimilated readily should not be employed lest the channels of promotion become overcrowded. Promotion should be based on demonstrated ability and not on favoritism. Although seniority may be recognized judiciously in making promotions, it should not be the controlling consideration. The rigid practice of seniority does not appeal to the young graduate and is frequently cited by him as one reason why he is not interested in railroad employment.

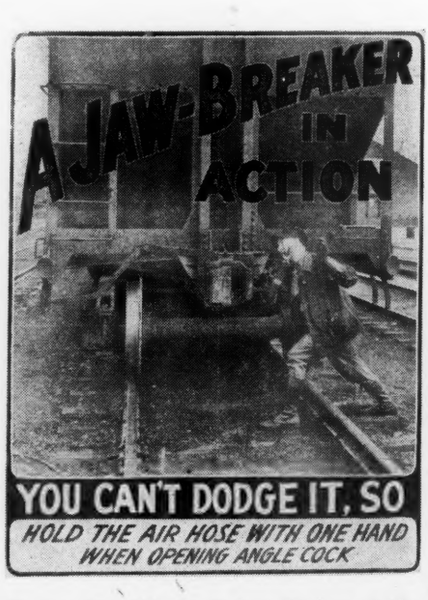
Even with the most critical selection of personnel, some mistakes are inevitable. Obviously, however, the final decision concerning a mistaken selection should be made only after an exhaustive study of the personalities and other conditions involved. Once the trainee's failure, however, has been established, there should be no hesitancy in his elimination.

It is recognized that there is a relation between the size of a railroad, the need for engineering recruits, and the justifiable extent of an employment-training program. In this, as in all other activities, there is danger of getting "too much harness for the horse," but little danger of getting too good a horse. Most railroads urgently need young engineers. They should seek the best available, but to get them will require a carefully planned program of employment The details and extent of such a program obviously should be adjusted to fit the needs of the individual railroad.

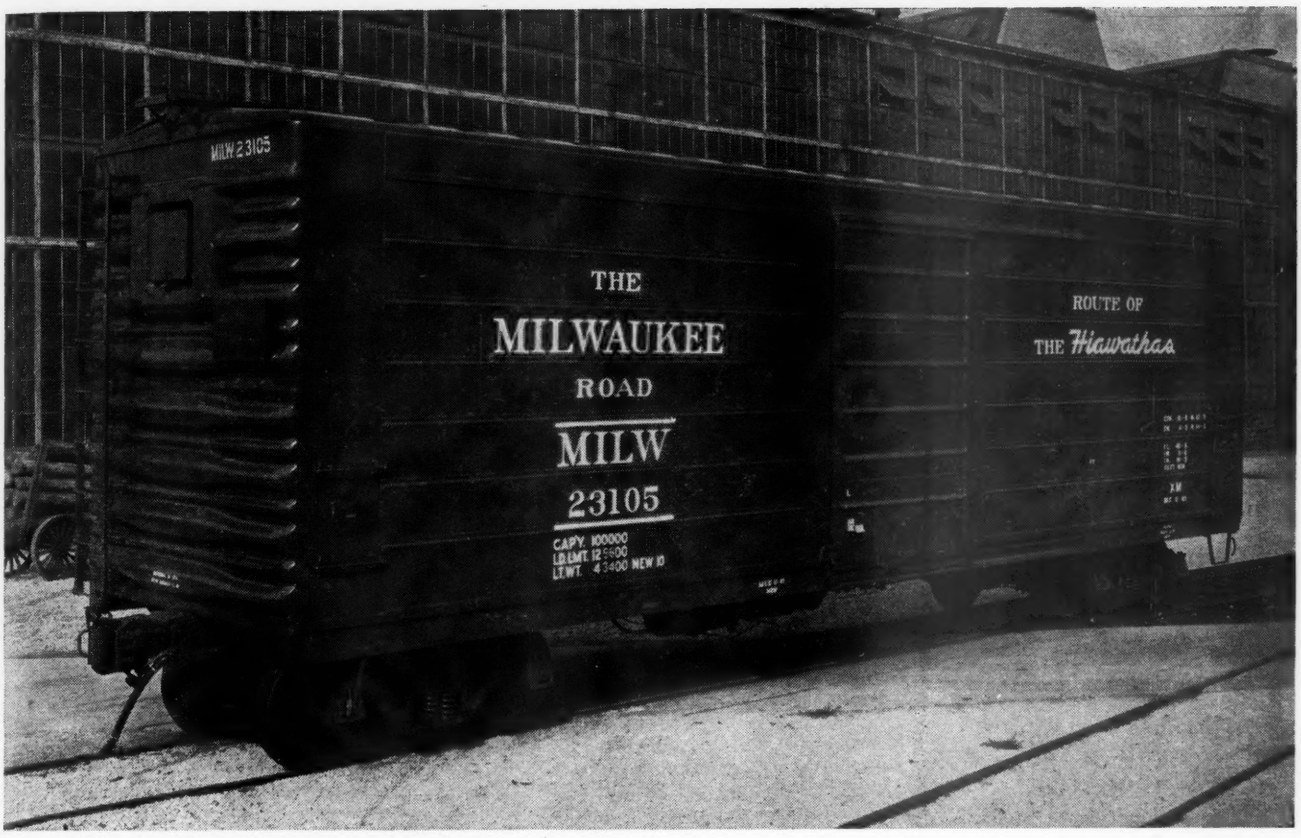
Employee Relationship

Regardless of the plan and system employed, interest in the welfare of the employee must be sincere. Many industries, including a few railroads, have diligently cultivated a favorable reputation for engineer-employee relations, but the reputation of the railroads generally in this respect has declined in the past 15 years. This is an unfortunate situation and one which merits our serious consideration. Favorable employment policies and employee relationships will develop loyalty and efficiency, and will reflect credit on the reputation of a railroad. The reputation of a railroad as an employer of engineers, as known to other faculty and students, is passed on from year to year, and becomes an important factor in the selection of employers by graduates.

Recognition on the part of railway managements, including the heads of the engineering departments, of the true value to the railroad of the civil engineer and the work he does is an essential prerequisite to the establishment of an adequate engineering department and a program for engineer replacements. The engineer must assume his proper position in the railroad family, and not until he is so established, and on an adequate salary basis, can the foundation be laid for a satisfactory and enduring program for the employment and training of engineering graduates.



Poster No. 283, April installment of the A.A.R.'s "All the Year—Every Year Safety Program," now being distributed



The Milwaukee's 40-Ft. 6-In. 50-Ton Welded Box Cars

IN 1941 the Chicago, Milwaukee, St. Paul & Pacific built in its shops at Milwaukee, Wis., 500 50-ton box cars. These cars were completely fabricated by welding and are practically the largest 50-ft. 6-in. box cars possible to build within Association of American Railroads clearance limits. The addition of this equipment raised the Milwaukee's ownership of 50-ft. 6 in. box cars adapted to general commodity loading exclusive of automobiles to slightly under 1,000 cars.

In 1946 the Milwaukee initiated the construction of the 750 50-ton, 40-ft. 6-in. box cars at the company shops embodying refinements in design and completed fabricating methods and built well out to the clearance limits so as to give maximum cubic capacity in a car of this length. These cars, designed for high-class commodity loading, will increase the Milwaukee's ownership of 40 ft. 6 in. box cars to practically 24,000.

According to the table of comparative dimensions it will be noted that, aside from the difference of 10 ft. in length, the 1941 and the 1947 cars are much the same. The inside height, width, and side- and end-door openings are identical. The light weight of the

Left—The side set-up jig. The side sill is being applied. In the background is the side turnover jig. Below—The bottom door sealer

1947 car is 43,500 lb. which gives a load limit of 125,500 lb. with a capacity of 4,136 cu. ft. The ratio of load limit to gross load is 74.3 per cent and the ratio of light weight to cubic capacity is 10.52 lb. per cu. ft., or slightly more in each instance than was the case with the longer 1941 car.

As in the case of the earlier cars, leak-proof side doors of the cars built in 1947 are mounted in rigid steel frames which are welded as units into the car sides and give increased strength at a point where it is greatly needed. There are two-piece car ends and narrow adjoining side pans, also prefabricated and welded into strong structural units. The car floor between the doorways is protected against wear by a perforated steel plate and sealer. Inside lining of plywood in readily renewable panels is applied at the doorways. These panels are 54 in. wide. Individual floor boards may be renewed without disturbing the side lining and easily removable cleanout boards permit thorough blowing out back of the lining at both sides and ends. The position of nailing posts inside of the car is indicated by vertical rows of dashes burned into every other lining boards by means of an electric marker.

This car embodies the Milwaukee construction with horizontal-rib side-sheet strips united by electric spot welding.

Partial List of Specialties and Materials on 750 Milwaukee 50-Ton Box Cars

Low-alloy, high-tensile steel:		
Cor-Ten		Carnegie-Illinois Steel Corporation, Pittsburgh, Pa.
N-A-X		Great Lakes Steel Corporation, Detroit, Mich.
Brake beams		Assembled at railroad company shops
Brake hangers, levers, etc.		Schaefer Equipment Company, Pittsburgh, Pa.
Brake-beam supports and bottom-rod guards,		Chicago Railway Equipment Company, Chicago
Hand-brakes	(375)	W. H. Miner, Inc., Chicago
	(375)	Universal Railway Devices Company, Chicago
AB brakes		Westinghouse Air Brake Company, Wilmerding, Pa.
Couplers and yokes		Buckeye Steel Castings Company, Columbus, Ohio
Draft gears	(250)	Cardwell Westinghouse Company, Chicago
	(250)	W. H. Miner, Inc., Chicago
	(250)	National Malleable & Steel Castings Co., Cleveland, Ohio
Steel doors, 6 ft.		Youngstown Steel Door Company, Chicago
Steel roofs, ends, door fixtures, metal floor plates, etc.		Standard Railway Equipment Company, Hammond, Ind.
Journal box lids (Motor Wheel)		T-Z Railway Equipment Company, Chicago
Car lumber and plywood		Douglas Fir Plywood Association, Tacoma, Wash.
Running boards, longitudinal		Apex Railway Products Company, Chicago
Side bearings, single roller		A. Stucki Company, Pittsburgh, Pa.
Stabilized trucks, Barber		Standard Car Truck Company, Chicago
Truck sides and bolsters		American Steel Foundries, Chicago
		Buckeye Steel Castings Company, Columbus, Ohio

The cars are built primarily of Cor-Ten and N-A-X low-alloy high-strength steel. The principal difference in construction over the earlier box cars is the use of heavier spot-welding equipment and the simplification of some of the assemblies in order to get increased output. The cars were turned out of Milwaukee shops at a rate of 10 a day.

General Dimensions and Weights of Welded 50-Ton Box Cars Built at Milwaukee Shops

	1941 car (50 ft. 6 in.)	1947 car (40 ft. 6 in.)
Length over striking castings, ft.-in.	51—7⅝	41—7⅝
Inside length, ft.-in.	50—6	40—6
Inside width, ft-in.	9—6	9—6
Inside height at center, ft.-in.	11— ¼	11— ¼
Inside height at eaves, ft.-in.	10—9	10—9
Distance between truck centers, ft.-in.	40—7⅝	30—7⅝
Width over side sheets, ft.-in.	10—1⅝	10—1⅝
Width over roof sheets, ft.-in.	9—8¼	9—8¼
Width over side ladders, ft.-in.	10—7⅜	10—7⅜
Heights — top of rail to top of floor, ft.-in.	3—7	3—7
Height — top of rail to running board, ft-in.	15— ⅝	15— ⅝
Width over door roller housings, ft-in.	10—8	10—8
Side-door opening, ft.-in.	9—6¾ by 6—0	9—6¾ by 6—0
End-door opening, A end, in.	16 by 18½	16 by 18½
Light weight, lb.	48,200	43,500
Load limit, lb.	120,800	125,500
Capacity, cu. ft.	5,157	4,136
Ratio load limit to gross load, per cent	71.5	74.3
Ratio light weight to capacity, lb. per cu. ft.	9.35	10.52

C. & O.-P.M. Merger Approved

I. C. C. sanctions proposal without requiring Alleghany Corporation to trustee Missouri Pacific stock, as recommended by Bureau of Finance

MERGER of the Pere Marquette into the Chesapeake & Ohio was approved by Division 4 of the Interstate Commerce Commission in an April 1 report which also authorizes the Alleghany Corporation to acquire, through the C. & O., control of P. M. properties. The division's report in Finance Docket No. 15228 follows generally the recommended findings of the proposed report by the commission's Bureau of Finance, which was noted in the *Railway Age* of November 2, 1946, page 737.

One bureau recommendation not adopted, however, was that which would have imposed a condition requiring Alleghany to deposit its shares of Missouri Pacific stock with an independent voting trustee. Such a condition had been urged by "an independent director" of M. P., but the division stated that "so long as title and operation of the Missouri Pacific properties are in the hands of a trustee in bankruptcy, we think the action herein desired by this intervenor is not warranted by the facts here of record." Meanwhile, the commission pointed out that any stock Alleghany may receive in a reorganized M. P. will have to be deposited with the Chase National Bank of New York as independent voting trustee under the trusteeship created pursuant to the commission's 1945 decision approving Alleghany's control of the C. & O. and New York, Chicago & St. Louis.

Conditions which the division did attach to its approval of the merger impose the usual employee-protection arrangements; require the C. & O. to maintain and keep open "all presently existing routes and channels of trade via existing junctions and gateways unless and until otherwise ordered by us"; and call for submission to the commission of journal entries whereby the acquisition would be recorded on C. & O. books. The division's "general conclusions" with respect to the merger on these conditions were that it "should be to the advantage of the public" in affording the P. M. "a higher degree of stability at times of stress, through increased support" of the C. & O. "Specifically," the report added, "patrons of the Pere Marquette would have greater assurance of continued service, at least over more important system arteries, and all shippers should reap the advantage of single-line hauls and rates which combination of the two systems will make possible."

Commission approval of the whole transaction was rounded out by other findings which authorize issuance by the C. & O. of the necessary securities, and acquisition (under the Panama Canal Act) by the C. & O. and Alleghany of ownership of vessels of the P. M., including its Lake Michigan car ferries. Another finding with re-

spect to these P. M. marine operations authorizes transfer to the C. & O. of the water-carrier certificate, dated February 23, 1944, which the commission issued to P. M. in Docket No. W-887.

Terms of the merger are: Each share of P. M. 5 per cent cumulative prior preference stock, including all accrued and unpaid dividends thereon as of the merger date, will be exchangeable for one share of 3½ per cent, cumulative, convertible, preferred stock and one-third of a share of common stock of the C. & O.; each share of P. M. 5 per cent cumulative preferred stock, including accrued and unpaid dividends, will be exchangeable for eight-tenths of a share of 3½ per cent cumulative preferred stock and four-tenths of a share of common stock of the C. & O.; and each share of P. M. common stock will be exchangeable for one-half share of C. & O. common.

New C. & O. Securities

To provide for this exchange, the commission approved issuance by the C. & O. of not exceeding $21,142,940 of 3½ per cent convertible preferred stock, consisting of 211,429.4 shares of $100 par, and $7,806,805 of common stock, consisting of 312,272.2 shares of $25 par. Also, the commission approved the sale by the C. & O. of such shares as come back to it in exchange for its P. M. holdings, and the further issuance from time to time of an additional $8,457,176 of common stock, consisting of 338,287.04 shares, in conversion of the convertible preferred stock. Initially the conversion ratio will be 1.6 shares of common for each share of the new convertible preferred.

The plan further provides, and the commission approved, assumption by the C. & O. of liability for P. M. indebtedness outstanding on the date of the merger, and assumption of liability as guarantor, with other proprietary companies of the Toledo Terminal Railroad Company, in respect of the payment of a portion of the interest on $5,800,000 of that company's first-mortgage 4½ per cent bonds. As of the date of the application, the report said, P. M. indebtedness consisted of $59,499,000 of first-mortgage 3⅜ per cent bonds, series D, $6,203,000 of equipment trust certificates, and $906,000 of promissory notes.

After testing the terms of exchange on the basis of such standards as market price, property value, and earnings the commission made a general finding that the price proposed to be paid by the C. & O. "appears to be just and reasonable." It went on to show that the price was $114,227,199, which "is about equal to the Pere Marquette's recorded investment in transportation property, less recorded depreciation and amortization, as of December, 31, 1945, $114,453,874." This, the commission added, "does not take into account current assets amounting, on the same date, to nearly $22,000,000."

New C. & O. Capital Structure

A constructed balance sheet giving effect to the merger indicates that the C. & O. capitalization would consist of: Capital stock, $220,383,689; funded debt unmatured, $214,122,000; equipment obligations, $47,430,736. To these figures should be added any equipment obligations authorized and issued subsequent to December 31, 1945, and deducted therefrom would be any retirements effected since that date, the commission explained. Road and equipment is shown on the constructed balance sheet at $814,951,437, with acrued depreciation thereon of $181,195,726, resulting in a net figure of $633,755,711.

Like the proposed report, the commission's decision included a general review of P. M.-C. & O. financial and traffic relationships, which pointed out that C. & O. now controls P. M. through ownership of 313,900 shares, or 69.69 per cent, of its common stock, and 13,950 shares, or 11.22 per cent, of its preferred — a total of 327,850 shares, or 47.74 per cent of all P. M. stock of all classes. Meanwhile, Alleghany controls C. & O. "through ownership of the beneficial interest of 606,634 shares, or 7.92 per cent of its common stock."

It was pointed out in the decision that the C. & O. and P. M. connect for the interchange of traffic at Toledo, Ohio, LaCrosse, Ind., and Chicago. The C. & O. was described as a 3,084-mile system which, in general, extends from the coal fields of southern West Virginia, eastern Kentucky, and southern Ohio, eastward to tidewater at Hampton Roads, Va., and north and west to the Great Lakes at Toledo and Chicago. The P. M. system, which embraces 1,949 miles of line, extends from Chicago, through Grand Rapids, Mich., and Detroit, to Buffalo, N. Y.; from Toledo, through Flint, Mich., and Saginaw, to Ludington, on the east shore of Lake Michigan; and from Grand Rapids to Petoskey, Mich. Also, it operates Detroit river car ferries, and its Lake Michigan car-ferry lines between Ludington and Wisconsin terminals at Manitowoc and Kewaunee.

The commission noted that affiliation of the two roads dates back to the Twenties, and that officers of the C. & O. were placed in corresponding positions with the P. M. in 1929. "Under this joint management," the report continued, "both carriers have profited in economies and in increased traffic." Later on, in discussing the "benefits of union," it stated that the merger "would not lessen competition, but would create a strong, well-balanced system that would afford stiffer competition to the New York Central, Pennsylvania, Baltimore & Ohio, and other railroads." Moreover, it "would not affect adversely adequate transportation service to the public," the commission also said, recalling how the applicants had asserted that "on the contrary, service would be improved."

As to the choice of merger rather than a consolidation, the report explained that the applicants regarded the merger "easier to handle mechanically" and "more economical in avoiding the issue of stock of a new consolidated company." The P. M. will nevertheless lose its identity. "Upon the merger date," the report said in that connection, "the corporate existence of the Pere Marquette will continue in the Chesapeake & Ohio in so far as provided by law, but otherwise will cease upon such date, and thereupon the two companies will be considered as a single corporation, namely, the Chesapeake & Ohio Railway Company, which will continue as a corporation of the Commonwealth of Virginia, possessing all the powers of both companies."

In addition to commission approval, as received in the present report, the merger agreement between the C. & O. and P. M. dirctors stipulates that assents be obtained with respect to 98 per cent of the C. & O. common stock and 98 per cent of the P. M. common and preferred held by others than the C. & O. However, there are provisions whereby the directors may proceed on the basis of a favorable vote of lesser percentage if they deem it "practicable and desirable," provided such favorable vote is sufficient to satisfy requirements of applicable Virginia and Michigan laws.

A Box Car "Gets Around."—Union Pacific research into the movements of one box car over a period of four and one half years has revealed the following data on car No. 193346: It passed through the hands of 83 different railroads, some as many as 10 times, for a total of 221 changes; it averaged a change every seven and one half days; it had been in every state at least once, in several Canadian provinces, and in every major city of the United States; and its loads ranged from boxes of ammunition to canned peas to oil drums. The road stated that car No. 193346 was chosen "since it represented a perfect nonentity among rolling stock, being neither old nor new, neither the best nor the worst. It was a 'John Smith,' the big red messengers that run the nation's errands."

Differential Rate on Ex-Barge Grain Condemned by Court

Upholds lower court ruling which set aside I. C. C. order authorizing reshipping rates from Chicago to East higher than ex-rail or ex-lake proportionals

PASSING for a second time on the so-called Ex-Barge Grain case, the Supreme Court of the United States on March 31 affirmed the lower court decision which set aside an Interstate Commerce Commission order authorizing rail proportional rates on ex-barge grain from Chicago to eastern destinations differentially higher than those applicable on ex-rail or ex-lake grain. It was a 7-to-2 decision, the opinion of the court being delivered by Justice Black while Justice Jackson filed a dissenting expression in which Justice Frankfurter joined.

The case was docketed in the Supreme Court as No. 72, *Interstate Commerce Commission v. A. L. Mechling, Inland Waterways Corporation, the Secretary of Agriculture, and the United States of America.* It was a case in which the commission was forced to defend its action without help from the Department of Justice; as the court's opinion noted, "the United States, represented by the Department of Justice, appearing as a defendant, admitted these allegations" [of the complaints].

Background of Controversy

Tracing the background of the controversy, Justice Black pointed out that the issue related to railroad rates on grain transported from Chicago to eastern destinations after it had been transported to Chicago from the west by connecting rail or water carriers. The through rates were combinations of rates for the movement west of Chicago and the proportional or "reshipping" rates east thereof. The latter were 8½ cents per 100 lb. lower than local rates on grain from Chicago to eastern destinations; and up until 1939 the Chicago-to-the-east proportional rates had been identical for grain whether brought to Chicago by connecting railroad, connecting lake steamer, or connecting barge.

In 1939, the eastern railroads filed tariffs with the commission which imposed on ex-barge grain the local rate from Chicago east, but left the 8½-cent-lower proportional rate applicable on ex-lake and ex-rail grain. The court quoted a railroad witness as having told the I. C. C. "candidly" that the purpose of the adjustment was to "drive this business off the water and back onto the rails where it belongs." The commission's original determination of the matter was to leave the adjustment in effect, but it went on to advise complainants that "in a proper proceeding" it might prescribe ex-barge proportionals lower than the local rates.

It was in passing upon this determination of the commission that the Supreme Court first considered the matter. As reported in the *Railway Age* of June 19, 1943, page 1235, it then upheld the commission, saying that the regulatory body, implying no approval of any rates involved, had merely reserved for future consideration the amount, if any, which the eastern roads could increase the proportional rates on ex-barge grain over those on ex-lake and ex-rail grain.

The I. C. C. Findings

The commission did that in a report on further hearing, as noted in the *Railway Age* of March 10, 1945, page 461. That report condemned as unlawful the application of the local rates to ex-barge grain; but that finding was without prejudice to the filing of new schedules fixing the proportionals on ex-barge grain 3 cents per 100 lb. higher than the ex-rail and ex-lake proportionals. It was the attack on this differential which brought the case before the Supreme Court for the second time, the United States District Court for the Northern District of Illinois having set aside and enjoined enforcement of the commission order in so far as it permitted the 3-cent extra charge.

In reasoning to its conclusion that this lower court ruling should be affirmed, the Supreme Court laid considerable emphasis on the Transportation Act of 1940 and the Congressional debates and committee reports relating thereto. It said that the statutory provisions which emerged from this legislative background "show that Congress enunciated positive policies and specific limiting standards which it expected the commission to follow in fixing rates, including 'differentials' between all-rail and water rail rates."

"The provisions of the Transportation Act of 1940, which brought water carriers under Interstate Commerce Commission jurisdiction," Justice Black continued, "were vigorously opposed in Congress by those who feared that the commission might raise barge rates in order to enable railroads better to compete with inherently cheaper water transportation. These opponents were repeatedly assured by sponsors of the 1940 act . . . that the questioned legislation unequivocally required the commission to fix rates which would preserve the inherent advantages of barge transportation: Lower cost of equipment, operation, and therefore service. As Senator Wheeler, spokesman of the Interstate Commerce Committee of which he was chairman, pointed out on the floor of the Senate, the 1940 act contains at least three separate provisions, a prime purpose of which is to protect the water carrier's natural advantages.

Provisions of 1940 Act

"The act's declaration of policy emphasizes that the act must be 'so administered as to recognize and preserve the inherent advantages' of 'all modes of transportation subject to this act.' In order that the inherent advantages might be preserved section 305 (c) provided that 'differences in . . . rates . . . and practices of a water carrier in respect of water transportation from those in effect by a rail carrier with respect to rail transportation shall not be deemed to constitute unjust discrimination . . . or an unfair or destructive competitive practice . . . .' And section 307 (f), requiring the commission, in fixing rates, to consider 'the effect of rates upon the movement of traffic by the . . . carriers for which rates are prescribed' emphasized that the commission must consider in fixing rates '. . . the need, in the public interest, of adequate and efficient water transportation service at the lowest cost consistent with furnishing of such service.'

"In addition, section 3 of the pre-existing act which forbade carriers 'to discriminate in their rates, fares, and charges between connecting lines,' was amended by the 1940 act specifically to include water carriers, such as these barge lines, within the definition of connecting carriers. Finally, section 2 of the pre-existing act has long forbidden the commission to authorize railroads to charge one person more than another for 'a like and contemporaneous service in the transportation of a like kind of traffic under substantially similar circumstances and conditions.'"

The foregoing provisions, as the court read them, "flatly forbid" the commission to approve barge rates

or barge-rail rates "which do not preserve the inherent advantages of cheaper water transportation, but discriminate against water carriers and the goods they transport." Applying this prohibition to the case in hand, the court said it means "that the Chicago-to-the-east railroads cannot lawfully charge more for carrying ex-barge than for carrying ex-lake or ex-rail grains to and from the same localities, unless the eastern haul of the ex-barge grain costs the eastern railroads more to haul than does ex-rail or ex-lake grain." And section 307 (d) authorizing the commission to fix differentials as between through water-rail and through all-rail rates, "does not authorize the commission to neutralize the effective prohibitions of the other provisions which were strengthened in 1940 expressly to prevent a discrimination against water carriers."

I. C. C.'s "Basic Error"

The court found that the commission fell into its "basic error" when it "seemed to act on the assumption that the congressional prohibitions of railroad rate discriminations against water carriers were not applicable to such discriminations if accomplished by through rates." This assumption, it said, "would permit the destruction or curtailment of the advantages to shippers of cheap barge transportation whenever the transported goods were carried beyond the end of the barge line." The present case "proves that," the court added.

It went on to say that to "penalize" the transportation of ex-barge grain by charging "discriminatory rates" from Chicago east "has precisely the same consequence as would follow from raising barge rates inbound to Chicago," which the commission recognized it "could not require" the barge lines to do after having approved their charges as reasonable in another proceeding. Justice Black also pointed out that the commission did not base its approval of the extra 3 cents on a finding that the eastern roads were not receiving a fair return for carrying the ex-barge grain; of the commission's argument generally he said that "most" of it "had no relation to what the reshipping rates from Chicago should be." He proceeded to advise that "if the western railroads need relief from the competition of barges, that is a question wholly unrelated to the rates of eastern roads."

As to the commission's contention that an upsetting of the proposal would cause "incurable chaos" in the national rail rate structure, the court noted incidentally that the rates had been equal prior to 1939 "without any apparent disruption." And it added that the possibility of disruption "does not remotely justify discrimination against barge traffic." Meanwhile, the court conceded that carriage of the ex-barge grain east of Chicago "may conceivably entail more service and therefore greater costs" than are involved in carrying ex-lake or ex-rail grain. In such circumstances, it went on, the eastern roads "may be justified in receiving an extra charge for that extra service wherever it is rendered." But "the extra service must fit the extra charge."

The court found no evidence before it which indicated that a higher charge was justified because of terminal services accorded ex-barge grain at Chicago. "All ex-lake grain reshipped from Chicago and an unspecified amount of ex-rail grain stopped in Chicago for processing requires exactly the same terminal service as is rendered there for ex-barge grain," it said. A similar conclusion was reached with respect to transit arrangements.

"To justify increasing the reshipping rates of ex-barge grain," the majority concluded, "the commission would have to make findings supported by evidence to show how much greater is the cost to the eastern roads of reshipping ex-barge grain than of ex-lake or ex-rail grain moving from the same localities and requiring the same service as does the ex-barge grain. . . . The unsifted averages put forward by the commission do not measure the allegedly greater costs nor indeed show that they exist."

The opinion stated further that Justice Frankfurter, who joined in Justice Jackson's dissent, would have sustained the commission's order "because he deems it amply supported by adequate findings of the commission differentiating the average circumstances and conditions surrounding all-rail and lake-rail transportation from those affecting barge-rail transportation, . . . and these findings are not without support in evidence."

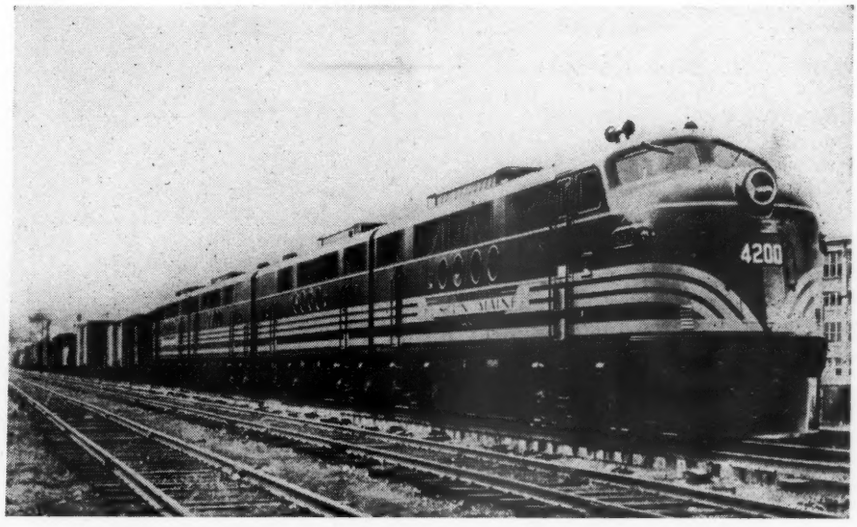
It appeared to Dissenter Jackson, as he put it, that the court "not only ignores findings of fact by the Interstate Commerce Commission contrary to our own oft-repeated pronouncements about the finality of administrative findings, but it also legislates out of the Transportation Act of 1940 at least two specific provisions which Congress put in and departs from the policy laid down in section 1 of the act."

The dissenting justice had in mind, first, the commission's authority as set out in section 307(d) to prescribe "reasonable differentials" as between all-rail rates and rail-water rates. "The court," he said, "reads this discretionary power out of the statute and holds that the commission may not establish any differential other than that created by the carriers themselves; that is to say, the only permissible differential is the difference between the barge rates and the rail rates for the water leg of the through journey."

His second point related to the requirement of section 307(f) that the commission give due consideration to the effect of rates "upon the movement of traffic by the carrier or carriers for which the rates are prescribed." "The commission," he added, "has done so and finds that a greater differential than that prescribed would create unjust advantages and diversions of traffic. But the court ignores the effect of what it orders on existing rate structures and on grain producing regions and shippers other than barge users. It simply writes in 'shall not consider' where Congress said "shall consider'."

Previously Justice Jackson had said: "Whether the congressional law or the court's amendments are the better for the country is a complicated problem of policy which, in my conception of our judicial function, I am not privileged to decide."

* * *



A 5,400-hp. freight locomotive in service on the Boston & Maine

GENERAL NEWS

Grondahl and Wight Get Henderson Medals

Franklin Institute's honors for contributions to art of railway signaling

George R. Henderson medals awarded by the Franklin Institute of Philadelphia, Pa., "for meritorious inventions or discoveries in the field of railway engineering" will be presented on April 16, 1947, to Dr. L. O. Grondahl, director of research and engineering of the Union Switch & Signal Co., Pittsburgh, Pa., and to Sedgwick N. Wight, engineer of train operation of the General Railway Signal Company, Rochester, N. Y. Dr. Grondahl will receive the medal "in consideration of

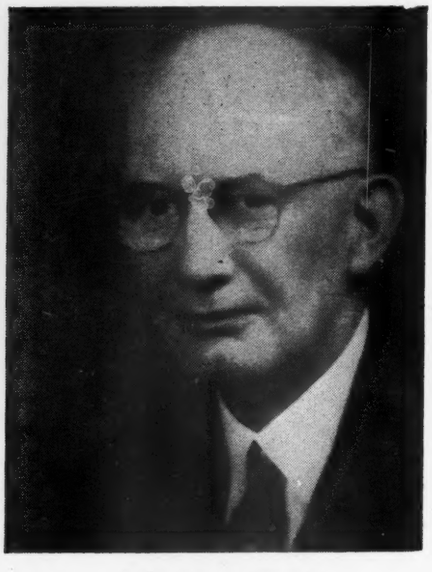
Dr. L. O. Grondahl

his contributions over a period of years to the development which has resulted in making available a practical system of inductive train communication." Mr Wight will receive his "in consideration of his accomplishments in the invention and development of major railroad signaling systems, thus contributing to the safety, speed and reliability of railroad operation."

Dr. Lars Olai Grondahl was born at Hendrum, Minn., November 27, 1880. He received his B. S. degree in 1904 and his M. S. degree in 1908, both from St. Olaf College, Minnesota. He became a lecture assistant at Johns Hopkins University in 1906 where he earned his Ph. D. degree in Physics in 1908. From 1908 to 1912, he was instructor in physics at the University of Washington. He then joined the faculty of Carnegie Institute of Technology where he became associate professor in 1917.

During World War I, Dr. Grondahl was commissioned captain in the Ordnance Corps and worked on problems connected with submarine detection under the direction of the Naval Consulting Board. In 1920 he became associated with the Union Switch & Signal Co. During World War II, he was a division member of the National Defense Research Committee, and chief of section 5.2 of the same committee. Dr. Grondahl is the recipient of the Potts Medal, the Modern Pioneer Award and an honorary degree of Doctor of Science from St. Olaf College. He has written numerous articles on technical subjects and is the holder of about 75 patents. He is a fellow of the American Physical Society and of the American Association for the Advancement of Science, and a founder of the Physical Society of Pittsburgh.

Dr. Grondahl first began work on train communication in 1923, when railroad men visualized the advantages to be gained by a means for communicating between the two ends of a freight train. Among the first efforts made by Dr. Grondahl to find a means of communication between the



Sedgwick N. Wright

ends of a train was the transmission of a signal through the already available medium of the train brake air line by the transmission of sound or pressure pulses. It was soon evident that a transmission system that did not extend beyond an assembled train would be unsatisfactory. It was obvious at once that it would then be necessary to use an electrical method of communication. Such a system has been

(*Continued on page 711*)

2 Months' Net Income Totaled $43,900,000

Net railway operating income for the same period was $101,202,013

Class I railroads in the first two months of this year had an estimated net income, after interest and rentals, of $43,900,000, as compared with $52,000,000 in the corresponding period of 1946, according to the Bureau of Railway Economics of the Association of American Railroads. The two-months net railway operating income, before interest and rentals, was $101,202,013, compared with $116,469,855 in the same period last year.

Estimated results for February showed a net income of $14,600,000, compared with $22,200,000 in February, 1946, while the net railway operating income for that month was $43,145,572, compared with February, 1946's $50,521,963. In the 12 months ended with February, the rate of return averaged 2.62 per cent, as compared with 3.61 per cent for the 12 months ended with February, 1946.

The A. A. R. statement said that operating expenses for the two months ended with February, 1946, "only partially reflect the retroactive wage increases applicable from January 1, 1946," and that the net earnings for those 1946 periods are thus "overstated to the extent of the exclusion of the retroactive wage payments."

Gross in the two months totaled $1,321,473,786, compared with $1,219,946,495 in the same period of 1946, an increase of 8.3 per cent. Operating expenses amounted to $1,048,327,763 compared with $953,037,483, an increase of 10 per cent. Thirty-eight Class I roads failed to earn interest and rentals in the two months, of which 17 were in the Eastern district, 5 in the Southern region and 16 in the Western district.

In the East—Class I roads in the Eastern district in the two months had an estimated net income of $7,500,000 compared with a net income of $4,300,000 in the same period of 1946. For February, their estimated deficit was $1,700,000 compared with a deficit of $2,000,000 in February, 1946.

The same roads in the two months had a net railway operating income of $33,685,084 compared with $30,441,572 in the same period of 1946. Their net railway operating income in February amounted to $10,892,796 compared with $11,249,289 in February, 1946.

Gross in the Eastern district in the two months totaled $605,483,776, an increase of 13.6 per cent compared with the same

period of 1946, while operating expenses totaled $497,279,891, an increase of 11.5 per cent.

Class I roads in the Southern region in the two months had an estimated net income of $11,200,000 compared with a net income of $12,900,000 in the same period of 1946. For February, they had an estimated net income of $4,800,000 compared with a net income of $6,900,000 in February, 1946.

Those same roads in the two months had a net railway operating income of $19,068,473 compared with $23,602,712 in the same period of 1946. Their net railway operating income in February amounted to $9,111,885 compared with $12,549,511 in February, 1946.

Gross in the Southern region in the two months totaled $193,583,906, an increase of 8.7 per cent compared with the same period in 1946, while operating expenses totaled $150,116,727 an increase of 14 per cent above 1946.

Down in the West—Class I roads in the Western district in the two months had an estimated net income of $25,200,000 compared with $34,800,000 in the same period of 1946. For February, they had an estimated net income of $11,500,000, compared with a net income of $17,300,000 in February, 1946.

Those same roads in the two months had a net railway operating income of $48,448,456 compared with $62,425,572 in the same period of 1946. Their net railway operating income in February amounted to $23,140,891 compared with $26,723,163 in February, 1946.

Gross in the Western district in the two months totaled $522,406,105, an increase of 2.7 per cent compared with the same period of 1946, while operating expenses totaled $400,931,145, an increase of 6.8 per cent above 1946.

CLASS I RAILROADS — UNITED STATES

	1947	1946
Month of February		
Total operating revenues	$635,939,761	$579,105,827
Total operating expenses	509,379,547	456,291,303
Operating ratio—per cent	80.10	78.79
Taxes	70,410,658	61,161,906
Net railway operating income (Earnings before charges)	43,145,572	50,521,963
Net income, after charges (estimated)	14,600,000	22,200,000
Two Months Ended February 28		
Total operating revenues	$1,321,473,786	$1,219,946,495
Total operating expenses	1,048,327,763	953,037,483
Operating ratio—per cent	79.33	78.12
Taxes	146,069,712	128,628,777
Net railway operating income (Earnings before charges)	101,202,013	116,469,855
Net income, after charges (estimated)	43,900,000	52,000,000

Company Magazines to Be Judged

Editors of company magazines published in the United States and Canada have been invited to participate in the second annual publications contest sponsored by the International Council of Industrial Editors. This contest is being conducted by the Wisconsin Regional Association of the council, and is under the direction of Joseph Dragnotto, editor of the Solar Corporation company magazine, who will supply entry blanks and information if addressed at P. O. Box 404, Milwaukee, Wis. The deadline for entries is April 25.

Each magazine entered will be judged in one of 15 different classiffications, thus giving editors of small, inexpensively produced magazines the same opportunity to win an award as will be given to editors of larger, more costly publications. The judges will consider the following points in scoring each entry: (1) Accomplishment of purpose; (2) editorial achievement; (3) appearance achievement; and (4) production achievement. Contest winners will be announced and awards presented at the annual convention of the International Council of Industrial Editors in St. Louis, Mo., May 15 and 16.

E. J. Engel, Retired Santa Fe President, Dies at 72

Edward J .Engel, who retired in 1944 as president and chairman of the executive committee of the Atchison, Topeka & Santa Fe, died in Pasadena, Cal., on March 30. He was 72 years old. Mr. Engel began his career as a clerk with the Santa Fe in 1899, advancing steadily until he became head of the road on March 28, 1939. At the time of his death he was a member of the board of directors and executive committee.

A. C. L. Tells Stockholders What the A. A. R. Is Doing

Stockholders of the Atlantic Coast Line have received a statement from President C. McD. Davis introduced by the explanation that "so much misinformation has been circulated recently about the Association of American Railroads it was felt that this statement about it might serve to clarify in your minds the vitally important position it occupies in all matters relating to the railroads."

The explanation of the A. A. R.'s activities begins with the observation that "all Class I railroads in the United States hold either full, limited or associate memberships" in the association, and goes on to say that "cooperative and voluntary participation in by far the large majority of the activities which are carried on through the A. A. R. is essential to preserve the present coordinated continent-wide rail transportation service. This is exemplified by the fact that a group of railroads whose recent withdrawal from the association has been much publicized found it desirable to continue to participate in functions and activities of the association which, measured by cost, represent some 83 per cent of the whole, exclusive of advertising and public relations work."

After outlining the functions of the six departments of the A. A. R., the statement continues:

"As part of the general activity of the railroad industry, the association carries on a program of advertising, public information and public relations, principally through use of national magazines and publications. There is ample evidence that the program has accomplished much of its intended purpose and has improved the public's understanding of the railroad industry and its appreciation of the accomplishments of the industry. . . .

"The accomplishments of the railroads in rising to the maximum efficiency which was so necessary in wartime is a matter of public record and well known to the public. The same maximum efficiency is no less necessary in time of peace if the railroads are to meet public service needs and at the same time earn a profit for the owners and those who have invested in them. The work of the Association of American Railroads is of benefit to management, employees, owners and investors, and the public served by the railroads, for the association, like its predecessor organizations in the past, is a real and definite force for more efficient operations, better service, improved earnings and worth while progress in transportation."

Say Air Freight Success Awaits 5-Cent Rate

Not until rates have been reduced to five or six cents a ton-mile can air cargo expect to attract the major portion of perishables and finished goods traffic, according to an article published in the April issue of the Northwestern University "Journal of Air Law and Commerce."

John L. Drew and Alan Passen, aviation consultants and authors of the report, "Air Cargo: A New Force in Marketing," assert that the average long-haul railroad carlot rate for fruits and vegetables is approximately 1.5 cents per ton-mile, and the express rate for fresh fish averages about 5.7. "The differentials between these rates and the estimated 9 cent rate for air cargo, expected by 1950, still would preclude air carriage for normal shipment of most commodities," the article stated.

R. S. M. A. Gearing Up for June Conventions

The Railway Supply Manufacturers Association, which will have charge of the great exhibition in the Convention Hall at Atlantic City during the Mechanical Division and Purchases and Stores Division, A. A. R., meetings, June 23-28, is making splendid headway in its preparations. The officers are: President, Norman C. Naylor, American Locomotive Company, New York; vice-president, C. W. Floyd Coffin, Franklin Railway Supply Company, New York; and secretary-treasurer, A. W. Brown, Room 1424, 30 Church st., New York 7.

The chairmen of the various committees are: Exhibit Committee, C. W. Floyd Coffin; Finance Committee, Charles J. Nieman, Pittsburgh, Pa.; Badge Committee, Raymond P. Townsend, Johns-Manville Sales Corporation, New York; Hotel Committee, Carter P. Whitcomb, Griffin Wheel Company, Chicago; By-Laws Committee, E. J. Fuller, Hunt-Spiller Manufac-

turing Company, South Boston, Mass.; Canadian Committee, Webb G. Krauser, Canadian Cardwell Corporation, Montreal, Que.; Foreign Relations Committee, Charles W. Wright, Pullman-Standard Car Export Corporation, Washington, D. C.; Entertainment Committee, Joseph E. Brown, Magnus Metal Corpporation, New York; Enrollment Committee, M. K. Tate, Lima Locomotive Works, Washington, D. C.; and Transportation Committee, C. C. Bailey, General Electric Company, Schenectady, N. Y.

New I. C. All-Coach Streamliner Begins Exhibit Trip April 15

The Illinois Central's new, all-coach day streamliner, "City of New Orleans," which is slated to begin daily operation between Chicago and New Orleans, La., on April 27, will start a preview exhibition tour of 33 stations along its route on April 15. When placed in service, the new train will complete the 921-mi. trip in 15 hr. 55 min., with departure and arrival on the same day. It will make 19 stops en route, and provide through car service to and from St. Louis, Mo., and Louisville, Ky., and New Orleans.

Two complete sets of "City of New Orleans equipment will be maintained, with one leaving each terminal daily. Each train will consist of six coaches, a dining car, a diner-lounge, a baggage-dormitory car, a mail and express car and an observation-bar-lounge. The coaches were built by the Pullman-Standard Car Manufacturing Company and the remainder of the cars were constructed in the road's shops. The motive power will be furnished by 6,000-hp. Diesel-electric locomotives built by the Electro-Motive Division of General Motors Corporation.

The christening ceremonies and public exhibitions of the train in Chicago on April 24 and in New Orleans on April 25 will conclude the pre-inauguration activities.

Taxpayers Meet C. N. R. Deficit

The Canadian Parliament has voted $8,961,570 to meet the deficit of the Canadian National as a result of its operations in the calendar year 1946. Another appropriation of $974,878 was voted as an additional sum required by statute to reimburse the Canadian National for carriage of goods on Eastern lines. The annual report of the Canadian National for 1946 and its budget for the current year will be dealt with by a special House committee at Ottawa immediately after Easter.

C. & O. Not Planning N. Y. C. Merger at Present

On March 6 the Chesapeake & Ohio held 387,700 shares, or 6 per cent, of the common stock of the New York Central, according to the C. & O. annual report. The stock, all of which has been or will be deposited in trust, in exchange for voting trust certificates, with the Chase National Bank of New York, cost $7,356,028.

The C. & O. has made this investment, the report said, in the belief that its affiliation with the New York Central will be highly beneficial to the traveling and shipping public and the security holders of both properties. Affiliation, the report continued, should add to diversification of C. & O. traffic and provide it with greater outlets for its coal traffic. The New York Central, in turn, it said, would be greatly strengthened by affiliation with a railroad on whose lines so large an amount of bituminous coal is produced.

The C. & O. management "does not presently propose a consolidation" of the two roads, the report went on. "The physical properties of the New York Central have been maintained in satisfactory condition, and it has no heavy maturities to be met for some years to come. But no plans for a merger or consolidation...should be advanced until the earning power and the credit standing of the New York Central shall have been improved."

While the present investment may be increased, the report said, the C. & O. "does not intend to add permanently to its total investment in railroad equities. It is anticipated that the pending sale of 78,145 shares of Wheeling & Lake Erie common stock to the Nickel Plate will soon be consummated, realizing approximately $4,170,000. Negotiations to dispose of...approximately $11,700,000 of W. & L. E. prior lien and preferred stocks are under way. The current market value of the stock interest in the Nickel Plate is approximately $6,700,000, and this should eventually be disposed of as our New York Central plans progress."

Robert J. Bowman, C. & O. president, said in New York on March 27 that within a few days the road would file an application with the Interstate Commerce Commission for the release from the voting trustee of the C. & O.'s holdings of New York Central stock. The C .& O. would propose, he added, that its Nickel Plate holdings be dsposited with the trustee in lieu of the New York Central stock.

Pullman Plant Producing 39 Cars Daily; Double 1946

Thirty-nine freight cars are being produced daily—more than double the 1946 average—at the Michigan City (Ind.) plant of the Pullman-Standard Car Manufacturing Company, Wallace N. Barker, executive vice-president, announced this week. He said that production will increase to a rate of one completed freight car every 10 minutes of the working day when larger steel supplies which have been promised become available this summer.

The plant's daily output includes 12 refrigerator cars and 27 box cars from two assembly lines. Until recently, Mr. Barker stated, the plant had been on a single-track schedule at one-third of its capacity. He asserted that 2,200 workers are now employed at the plant, and that barring interferences, production and employment are "headed for the highest sustained volume in many years."

Mr. Barker said that the Michigan City plant is particularly adapted to long runs of standard box cars, and that work would begin this summer on more than 6,000 cars having essentially the same specifications.

C. R. I. & P.-S. P. Cut Chicago-San Diego Running Time

Through sleeping car and chair car service from Chicago to San Diego, Cal., via the "Golden State route" of the Chicago, Rock Island & Pacific and the Southern Pacific is now operating on the "Imperial," departing from Chicago at 11:00 a. m. daily and arriving San Diego at 3:15 p. m. the second day—9 hr. faster than the former service provided by these road's "Californian." A standard sleeper replaces the tourist sleeper and a cafe-lounge is now available from Yuma, Ariz., to San Diego. Eastbound the new service will leave San Diego at 10:15 a. m., arriving in Chicago at 5:15 p. m. the second day, reducing the running time 6 hr. 20 min.

Mid-West Shippers Hold Special Discussion of Headaches

At the first such special meeting ever held, the executive and railroad contact committees of the Mid-West Shippers Advisory Board assembled in Chicago March 28 to discuss urgent car supply and transportation problems.

The executive committee aired complaints and recommended action which the railroads might take to remedy them. Need for additional intermediate supervision was emphasized and considered justified by the benefits which would accrue through reduction of per-diem, retention of traffic, quicker turn-around and increased availability of equipment. An alleged increase in the number of "no-bill" cars and in the time required to reconcile the bills to the cars was discussed.

Railroads experiencing congestion should not hesitate to recommend alternate routes until the situation is corrected, according to some of the shippers present. On their part, shippers should ascertain the best service routes and favor the fastest while the car shortage exists, regardless of solicitation or "friendly relations," the meeting was advised. One shipper claimed that, in consigning a total of 200 cars he found one route averaged 13 days in transit, and another anly 7 days, that is, a saving of 800 car-days could have been realized by favoring the road giving the service.

Shippers also asserted they want to receive bad order reports so they can anticipate delays or make substitute shipments. The new "Sentinel Service" offered by the Baltimore & Ohio was commended as "just what is wanted and needed."

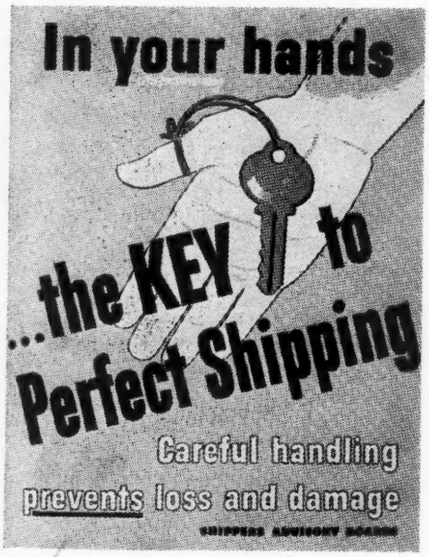
In a discussion before the committee, J. J. Mahoney, general superintendent of transportation of the Atchison, Topeka & Santa Fe, chairman of the railroad contact committee, told the shippers that one encouraging note is the program of the car builders, steel men and carriers to produce 10,000 cars monthly. He stated that steps were under way to distribute cars on a 90 per cent ownership basis, and mentioned Interstate Commerce Commission Service Order No. 648, granting priority on box cars for export grain held in terminal ele-

vators, as contributing materially to the shortage of cars available to country elevators. Supervision, he claimed, has not been reduced to any extent since the war, but the caliber of men available for intermediate supervisory jobs is not all it might be. Improvement in service may be expected with the onset of good weather and consequent reduction in absenteeism, he predicted. Mr. Mahoney believes a higher per diem rate would create an incentive to move cars and build cars.

E. W. Coughlin, assistant to chairman, Car Service Division of the Association of American Railroads, attributed the car shortage to exceptionally high loadings; the long period of starvation earnings and accompanying car surplus in the thirties, and to restricted production during the war. He stated that 131,600 cars are now on order and that receipt of this new equipment would end the car shortage.

11th Annual Shipping Campaign

"Somebody used a box that was too weak for the nature or weight of the contents. No? Well then the contents were not properly packed in that box —not enough or not the right sort of separators, partitions or pads to resist the crushing forces, or stress, or shock that are among the ordinary hazards of transportation. No? Well....."



So continues a pamphlet issued by the national management committee, Regional Shippers' Advisory Boards, which is spearheading the April Perfect Shipping Campaign (announced in last week's *Railway Age*, page 666). Distributed widely among shippers and carriers, this pamphlet and the above poster are helping to point up the importance of the campaign, sponsored by the Shippers Advisory Boards, the Association of American Railroads and other transportation bodies.

Alton Celebrates Centennial

The Alton this year celebrates a hundred years of service to the public, and a "century of pioneering" in the transportation industry.

Incorporated as the Alton & Sangamon Railroad Company, on February 27, 1848, the road operated successively as the Chicago & Alton *Railway* and the Chicago & Alton *Railroad*, finally, on January 7, 1931, being incorporated as the Alton Railroad. At the same time the Baltimore & Ohio acquired the entire capital stock of the new corporation. Control subsequently passed to the Gulf, Mobile & Ohio, and the Alton is now in the process of consolidation with the "Rebel Route," to become the northern link in a through Lakes-to-Gulf system.

The first sleeping car embodying the general design created by Pullman ran on the Alton. George M. Pullman experimented with two converted Alton coaches in 1858 and 1859, and his first completely new sleeper appeared on the Lincoln funeral train which operated over Alton rails from Chicago to Springfield, Ill. The Alton also proudly states that it pioneered in the institution of railroad dining car service, and that the world's first all steel bridge carried trains of the Alton across the Missouri river at Glasgow, Mo., in 1879. Less widely known is the Alton's construction in 1900 of the world's largest camera to photograph the then-new "Alton Limited," 8-hr. Chicago-St. Louis day express.

Union Pacific Says Good-bye to Tourist Sleepers

Because the "tourist sleeping car is an outgrowth of the old emigrant car, and is an antiquated, outmoded type of railroad equipment," the Union Pacific has discontinued its use in all regular main line trains operating between Chicago, Denver, Colo., Salt Lake City, Utah, Portland, Ore., and Spokane, Wash., G. F. Ashby, president, announced last week. He said the road would also eliminate tourist cars on all regular trains operating to other Pacific Coast points as quickly as arrangements can be made.

"The tourist car has served its purpose and served its purpose well," he declared, "but the U. P. is removing this type of car from its regular main line trains so that it can offer the most modern type of equipment to the traveling public. Nowadays, passengers prefer the cars operating in expedited service, in which much time is saved. Furthermore, the U. P. has more lightweight coaches in sleeping cars on order, which will be put into service immediately upon delivery.

Travel Credit Plan Under Way with 10,000 Cards Issued

Approximately 10,000 credit cards have been issued by the Rail Travel Credit Agency, Chicago, in the "travel-and-charge-it" plan of 45 railroads, which began operation on April 1, the agency reported this week (details of the plan were outlined in the *Railway Age* of February 22, page 418). An average of 800 to 1,000 credit card applications are being received daily, with a total of 40,000 applications already on hand, it was stated.

The agency expects to issue 200,000 cards by the end of the year. H. W. Siddall, chairman of the agency, said that "a dozen or fifteen important roads are still outside the plan, but they are considering it, and we hope to have the entire country covered by the end of the year."

Railway Exhibit to Travel After Atlantic City Meeting

An exhibit designed to tell the story of railroad "essentiality" by use of color, light and animation will be presented at the Atlantic City, N. J., exhibition of the Railway Supply Manufacturers Association, June 23 to 28, by the Railway Business Association. The exhibit is being prepared in cooperation with the Association of American Railroads, and after the June convention that organization will display it at large railroad stations throughout the country. This procedure was followed in 1937 with a somewhat similar exhibit.

Grondahl and Wight Get Henderson Medals

(Continued from page 708)

developed and has made it possible to communicate not only between vehicles in the same train but between different trains on the same or different tracks and between trains and wayside offices. With this system a frequency modulated carrier current is induced in wayside wires or any wires not more than 200 feet from the rails. These carry the communication current, and at the receiving end this current is inductively transferred from the wires into the track and is picked up by the receiving equipment.

Sedgwick North Wight was born in Andover, Ohio, March 21, 1879. He received his B. S. degree from Hiram College, Ohio, in 1903. In the following year he started as a draftsman for the Lake Shore & Michigan Southern (now New York Central) in its signal department at Cleveland, Ohio, and was later promoted to signal inspector. He joined the General Railway Signal Company, Rochester, N. Y., as assistant commercial engineer in 1910, subsequently working his way up to his present position.

His outstanding contributions to railroad signaling are his absolute-permissive block system, centralized traffic control, and entrance-exit electric interlocking. The absolute-permissive block system involves the fundamental principle of automatic detection of train direction. It prevents trains moving in opposite directions from entering the same piece of single track between sidings, but permits trains moving in the same direction to follow each other at speed and with the complete safety they would have on a double-track line.

Centralized traffic control is a system of railroad operation whereby the movement of trains over routes in interlockings and through blocks on a designated section of track is directed by signals controlled from a central point. It consists of a control machine at a central office, with auxiliary equipment at outlying points by means of which track switches and associated signals in the prescribed territory are controlled by a single operator, and with checks against human error.

Interlocking is a branch of railway signaling the purpose of which is to provide a safe path for the movement of trains

through switches, junctions, terminal stations, yards and crossings. With the entrance-exit electric interlocking system, the entrance of a train is visually and audibly announced on a control panel and the operator, knowing its destination, has merely to push an "entrance" button where the train is entering the route and an "exit" button where it is to depart. This is to be compared with the former practice when switches and signals were positioned manually and individually.

N. C. & St. L. to Inaugurate New Streamlined Train

Effective April 27 the Nashville, Chattanooga & St. Louis will commence operation of its new streamliner, "City of Memphis," between Nashville, Tenn., and Memphis. The de luxe coach train will make the run in five hours, cutting approximately two hours from existing schedules.

Shippers Boards Expect Higher Second Quarter Loadings

Freight car loadings in the second quarter of 1947 are expected to be 33.2 per cent above those in the same period in 1946, according to estimates compiled by the 13 Shippers Advisory Boards.

It was explained at the Association of American Railroads that last year's second quarter was a period in which loadings were affected adversely by strikes of bituminous coal and iron ore miners. Also, it was the time of the nationwide railroad strike. The A. A. R. calculated that the effect of these stoppages was to reduce loadings in 1946's second quarter some 1,683,000 cars below what they otherwise would have been. If that figure is deducted from the increase estimated for this year's second quarter, 2,031,280 cars, the expected rise above last year's "normal" level would be about 348,000 cars.

On the basis of those estimates, freight car loadings of the 32 principal commodities will be 8,149,699 cars in the second quarter of 1947, compared with 6,118,419 actual car loadings for the same commodities in the corresponding period last year. All of the 13 boards estimate an increase in carloadings for the second quarter of 1947 compared with the same period of 1946.

The tabulation below shows actual carloadings for each district in the second quarter of 1946, the estimated loadings for the second quarter of 1947, and the percentage of increase.

The 13 boards expect an increase in the second quarter, as compared with the same period last year, in the loading of 25 of the commodities listed, and a decrease in 7. Among those showing the greatest increase are the following:

Ore and concentrates, 105.3 per cent; coal and coke, 73.7 per cent; automobiles and trucks, 59.1 per cent; iron and steel, 27.1 per cent; metals other than iron and steel, 53.7 per cent; cottonseed, soy bean-vegetable cake and meal, except oil, 44.1 per cent; vehicle parts, 37.5 per cent; agricultural implements and vehicles, other than automobiles, 31.9 per cent; brick and clay products 19.9 per cent; machinery and boilers, 19 per cent; flour, meal and other products, 17.2 per cent; grain, 17.1 per cent; lumber and forest products, 13.6 per cent; sugar, syrup and molasses, 12.4 per cent; gravel, sand and stone, 11.8 per cent; and salt, 11.6 per cent.

Commodities for which decreases are estimated and the amount of the decrease include the following: Potatoes, 17 per cent; other vegetables, 12.5 per cent; livestock, 11.5 per cent; hay, straw and alfalfa, 7.6 per cent; poultry and dairy products, 6.1 per cent; and citrus fruits, 2.2 per cent.

Shippers' Advisory Boards	Actual Loadings Second Quarter 1946	Estimated Loadings Second Quarter 1947	Per Cent Increase
New England	132,687	142,388	7.3
Atlantic States	664,359	752,477	13.3
Allegheny	674,873	1,191,792	76.6
Ohio Valley	593,307	1,050,280	77.0
Southeast	836,640	941,506	12.5
Great Lakes	402,165	590,627	46.9
Central Western	214,875	246,970	14.9
Mid-West	725,647	947,927	30.6
Northwest	461,715	735,857	59.4
Trans-Missouri-Kansas	338,203	399,050	18.0
Southwest	509,395	514,596	1.0
Pacific Coast	349,422	379,869	8.7
Pacific Northwest	215,131	256,360	19.2
Total	6,118,419	8,149,699	33.2

Seattle Will Be Headquarters of Revived G. N. Division

Seattle, Wash., will become a division headquarters of the Great Northern on July 1, when the road's Cascade division, consolidated in 1931 with the Spokane (Wash.) division, will be reestablished, I. E. Manion, general manager, Lines West, announced last week. The division will embrace G. N. territory west of Wenatchee, Wash., north to Vancouver, B. C., and south on the pool line to Portland, Ore.

Approximately 25 persons, including a superintendent, master mechanic and division roadmaster, will make their headquarters in a second story addition to the line's King Street freight house, now under construction at a cost of approximately $80,000.

C. N. Takes Over Communication System in Canada, Alaska

Public and commercial telephone and telegraph service was made available via the Northwest Communication System between Edmonton, Alta., and Fairbanks, Alaska, on April 1, thereby bringing the Northwest districts of Canada and Alaska in close touch with the trade and commerce of the United States and Canada, the Canadian National announced this week. The system, constructed during the war as a defense project, will be operated by the Canadian National Telegraphs (a subsidiary of the C. N.), and will connect with commercial companies at Edmonton and Fairbanks.

Freight Car Loadings

Loadings of revenue freight for the week ended March 29 totaled 829,412 cars, the Association of American Railroads announced on April 3. This was a decrease of 14,629 cars, or 1.7 per cent below the previous week, an increase of 20,270 cars, or 2.5 per cent above the corresponding week last year, and a decrease of 6,588 cars, or 0.8 per cent, below the comparable 1945 week.

Loading of revenue freight for the week ended March 22 totaled 844,041 cars, and the summary for that week as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loading
For the Week Ended Saturday, March 22

District	1947	1946	1945
Eastern	172,049	162,107	163,805
Allegheny	179,606	175,991	182,219
Pocahontas	63,127	59,294	54,304
Southern	136,081	141,155	131,982
Northwestern	92,380	83,760	84,533
Central Western	134,558	118,594	125,451
Southwestern	66,240	63,705	74,447
Total Western Districts	293,178	266,059	284,431
Total All Roads	844,041	804,606	816,741
Commodities:			
Grain and grain products	53,717	43,457	45,841
Livestock	14,142	15,883	15,668
Coal	184,735	190,058	167,142
Coke	14,859	13,449	15,022
Forest products	50,585	41,657	39,605
Ore	15,163	10,316	17,879
Merchandise l.c.l.	123,980	124,747	110,403
Miscellaneous	386,860	365,039	405,181
March 22	844,041	804,606	816,741
March 15	841,147	799,906	816,556
March 8	805,789	786,189	767,055
March 1	850,031	782,397	785,736
February 22	776,689	723,281	772,396
Cumulative total, 12 weeks	9,688,603	8,923,837	9,242,230

In Canada.—Car loadings for the week ended March 22 totaled 72,481 cars, as compared to 72,728 cars for the previous week and 71,104 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
March 22, 1947	72,481	42,597
March 23, 1947	71,104	38,804
Cumulative totals for Canada:		
March 22, 1947	814,761	441,752
March 23, 1947	793,596	421,381

Y. M. C. A. Transportation Conference

The seventy-fifth anniversary international transportation conference of the Railroad Y. M. C. A, will be held April 24 to 26, inclusive, at the Hotel Cleveland, Cleveland, Ohio. Association leaders will review the achievements of the past and discuss the challenge of the future, and railroad and brotherhood officers will be among the speakers. The conference chairman is R. V. Fletcher, who recently retired as president of the Association of American Railroads, and the chairman of the sponsoring committee is Robert J. Bowman, president of the Chesapeake & Ohio and Pere Marquette.

News of organizations and clubs, overseas railroads and car service orders has been segregated in special columns and will be found on pages 720, 720, and 718, respectively.

With the Government Agencies

I. C. C. Holds Hearing on Eastern Fare Hike

Parmelee and railroad officers support increase; little opposition indicated

Oral argument on that phase of the Docket No. 29711 proceeding wherein the Eastern district and Pocahontas region railroads seek Interstate Commerce Commission authority to increase basic passenger fares from 2.2 to 2.5 cents per mile in coaches and from 3.3 to 3.5 cents per mile in parlor and sleeping cars, and on that phase of the Docket No. 29678 proceeding in which the New York, New Haven & Hartford seeks similar increases, will be held before the commission in Washington, D. C., on April 17, it was announced this week following the conclusion of hearings.

The railroads' plea was summarized by Dr. Julius H. Parmelee, director of the Bureau of Railway Economics of the Association of American Railroads, who told the commission that the 1945 and 1946 net earnings of the Eastern district and Pocahontas region roads were affected by "unusual, nonrecurring items." Noting that the Eastern district roads handle about 95 per cent of the passenger-miles of that district and the Pocahontas region combined, Dr. Parmelee pointed out that after V-J Day a number of carriers made large charges to operating expenses to complete the amortization of property certified as emergency war facilities under Section 124 of the Internal Revenue Code.

"These charges," he said, "for the months of September to December, 1945, amounted to $223,941,600 for the Eastern district . . . and $59,446,376 for the Pocahontas lines. A considerable adjustment in accruals for Federal income taxes resulted from these charges."

Effect of Amortization—Dr. Parmelee said that a study made by the I. C. C.'s Bureau of Transport Economics and Statistics of the effect on net earnings for 1945 of the amortization charges showed that the net railway operating income of Eastern district roads would have been approximately $346,000,000 instead of $289,000,000 as reported, if the "heavy amortization charges of the last four months of 1945 had not been made."

After reviewing the effect of carry-back credits against federal income taxes on the 1946 net earnings of the carriers, Dr. Parmelee stated that the "drastic decline" in the net earnings from 1945 to 1946 could be attributed to the fact that 1946 operating revenues and operating expenses in the Eastern district increased 61.2 per cent, and 96.0 per cent, respectively, over 1940.

"The high point in net earnings during the war period in the Eastern district was the year 1942 when net income was $304,000,000," he continued. It will also be noted that operating revenues in 1946 were only $34,000,000 less than in 1942, but net income fell to less than $1,000,000 and would have been a deficit of more than $78,000,000 had it not been for the carry-back tax credits taken during the year. In the Pocahontas region, 1941 was the year of peak net earnings in the war period. Operating revenues in 1946 were greater than in 1941 by $61,000,000, but net income declined by nearly $24,000,000, even after taking carry-back tax credits of $2,265,000,"

Volume of Travel—With respect to passenger-miles in the Eastern district, Dr. Parmelee reported that the 1946 total was 23.3 per cent below 1944, when the volume was three times that of 1940 and 71.1 per cent above the pre-war high of 1920. He said that the 1946 figure was nearly one-third above the 1920 mark and more than double that of 1940.

In coach travel, other than commutation service in the Eastern district, passerger-miles in 1944 were nearly four times those of 1940, but receded nearly 30 per cent below that peak level in 1946, Dr. Parmelee said. He added that sleeping and parlor car travel in 1944 was 2¾ times that of 1940, but fell off more than 20 per cent from that high in 1946. He said that cancellation of reduced furlough fares has resulted in the average revenue per passenger-mile at the present time "more or less" reflecting fully the increase in fares authorized by the I. C. C. in February, 1942.

"However," he added, "the distribution of passenger traffic between commutation, coach and Pullman travel is not yet on a normal basis. In 1940, commutation passenger-miles represented 26.4 per cent of total passenger-miles in the Eastern district; coach (other than commutation), 51.8 per cent; sleeping and parlor car, 21.8 per cent. In 1946, the respective ratios were 16.1, 63.2 and 20.7 per cent, respectively."

Decline Accelerating—Observing that passenger revenue in January, 1947, declined by 26.6 per cent in the Eastern district and by 49.9 per cent in the Pocahontas region, as compared with January, 1946, Dr. Parmelee said that for the Eastern district and Pocahontas region combined, passenger revenue for January, 1947, was the lowest since

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More Bills Propose Crosser Act Revamp

Hawkes sponsors new measure in Senate while House gets three like it

Three bills to amend the Railroad Retirement and Railroad Unemployment Insurance acts have been introduced in the House while the Senate has received a like measure from Senator Hawkes, Republican of New Jersey, who described his proposal as one "designed to place these laws on a sound and workable basis and to overcome many of the numerous objections which have been raised by employees in the railroad industry and employers in the railroad industry to the many innovations that were contained in the so-called Crosser Act." The Hawkes bill is S. 994, while the House bills are H. R. 2853, H. R. 2854, and H. R. 2911, sponsored, respectively, by Representatives Gillette of Pennsylvania, Howell of Illinois, and Leonard W. Hall of New York, Republicans.

Hawkes Proposes Tax Cut—In offering his bill, Senator Hawkes made a statement in which he indicated how his proposal would affect important features of the Crosser Act. First of all it would raise the maximum annuity from $120 to $135, while reducing the 1947 pension tax on employees (railroads pay a like amount) from 5¾ per cent of taxable payroll to 5¼ per cent, where it would remain. Under the Crosser Act this tax is scheduled to become 6¼ per cent on employees and employers for 1952 and thereafter.

The cash death benefit, eliminated by the Crosser Act, would be restored by the Hawkes bill "as accumulated up to December 31, 1946, under the Act of 1937." Crosser Act provisions authorizing retirement of women employees with full annuity at 60 years of age would be retained, as would the more liberal years-of-service requirements with respect to disability. In the latter connection, however, the disability would have to be "occupationally incurred," whereas the Crosser Act's disability provisions apply regardless of how the disability is incurred.

There would be no change in the minimum-annuity provisions, but the survivor-annuity benefits would be scaled down to the level of those provided in the general Social Security system. The Crosser Act provides survivor-annuity benefits about 25 per cent more liberal than those of the Social Security system.

The proposed amendments to the Unemployment Insurance Act would strike out the sickness and maternity benefits added by the Crosser Act and put the unemployment-insurance tax on a sliding-scale basis which would immediately reduce this levy

(paid entirely by the railroads) from 3 per cent to ½ per cent of taxable payroll. This proposed unemployment-tax schedule would introduce the "merit system," leaving the tax at ½ per cent while the Unemployment Insurance Fund in the Treasury remained above $350,000,000 (it is now approximately $850,000,000), and increasing it by ½-per cent steps as the fund decreased until it was less than $150,000,000, when the 3 per cent rate would be restored. Meanwhile, the bill would retain the maximum unemployment benefits on the Crosser Act basis — $25 a week for 26 weeks in any benefit year.

Latimer's Objectives—Unemployment Insurance Act amendments along the same lines are proposed in another bill introduced earlier by Senator Hawkes. It is S. 670, now pending before the Senate committee on education and labor.

In his statement explaining S. 994, Mr. Hawkes said that "many of the features contained in the Crosser amendments, which were so strongly advocated by the former head of the Railroad Retirement Board [Murray W. Latimer], were designed, among other things, to carry out experiments in social security and to enlarge the bureaucracy of the Retirement Board, thus providing thousands of new jobs for government employees who would be paid out of the money contributed to the retirement fund."

"An analysis of the complaints," Senator Hawkes continued, "indicates that railroad workers want their money spent for retirement benefits for themselves and their families, and are not interested in the hiring of additional government employees. It also indicates their fear that unwise social experiments might endanger the soundness of their present retirement and unemployment insurance systems. This bill proposes to give them the benefits they desire most, at the lowest possible cost."

The Senator also recalled that he had protested when the Crosser Act "was jammed through [the Senate] at the close of business last year." He went on to indicate his view that the proposed amendments would be in accord with the "general feeling" as to what the railroad employees really want. He noted that employees pay no tax to support the unemployment-insurance benefits, but added that "they, as well as the carriers, have objected strenuously to the insurance for non-occupationally incurred sickness and accidents, and the pregnancy and maternity benefits which were added by the Crosser amendments, for they feel these features represent an unwarranted burden on the fund."

Reports Bill to Alter I. C. Act Security-Issue Provisions

The House committee on interstate and foreign commerce has reported favorably to the House the bill introduced by its chairman, Representative Wolverton, Republican of New Jersey, to amend the Interstate Commerce Act's section 20a(1) to extend to sleeping-car companies the Interstate Commerce Commission's jurisdiction over interlocking directors and the issuance of securities by carriers. The bill, H.R. 2331, would also add a proviso making less restrictive the provisions of section 20a(12), which makes it unlawful for any officer or director of a carrier to profit from security sales by such carrier.

The committee's favorable report reproduced a letter commenting on the bill which had been received from Commissioner Splawn, chairman of the I. C. C. legislative committee. The Splawn letter endorsed the bill, saying with respect to the sleeping-car-company phase that, regardless of the outcome of current proceedings on the disposition of Pullman's sleeping-car business, "it appears desirable that in the future this commission have the power to pass upon issues of securities of the Pullman Company or its successor as well as upon interlocking directorates affecting that company and railroad companies."

As to the proposed section 20a(12) amendment, Commissioner Splawn pointed out that commission regulations now require "as a general rule" that carrier securities be sold on the basis of competitive bids. He added that the paragraph in its present form is therefore "unnecessary and has been found to have an undesirably restrictive effect." The text of the proposed new proviso was given in the *Railway Age* of March 8, page 514.

Pullman Sale to Railroads Upheld by Supreme Court

The Supreme Court this week upheld the January, 1946, decision of a special three-judge federal court, sitting at Philadelphia, Pa., which approved sale of the Pullman Company's sleeping-car business to the so-called "buying group" of 56 railroads. The Supreme Court's ruling was a so-called *per curiam* decision, there being no written opinion; and it was revealed in a brief announcement which said that the Philadelphia court's determination had been affirmed by an equally-divided Supreme Court, Justice Jackson not participating.

This meant that the court's vote was 4 to 4, and the precedent in cases of tie votes is that the ruling of the lower court stands. The case reached the Supreme Court on appeals from the Philadelphia court's ruling which were filed by the Department of Justice and others, including the Chesapeake & Ohio, New York, Chicago & St. Louis, and Pere Marquette. The proposed sale is the aftermath of the successful anti-trust action against the Pullman companies, Pullman, Incorporated, the holding company having elected to sell the operating business and retain the Pullman-Standard Car Manufacturing Company.

C. I. O. Strike Threat Brings Forth Emergency Board

President Truman last week created an emergency board to investigate a wages and rules dispute between four railroads and their car-ferry employees as represented by the National Maritime Union, Congress of Industrial Organizations. Creation of the board brought about postponement of a strike which had been set for March 31. The railroads involved are the Grand Trunk Western, Pere Marquette, Wabash and Ann Arbor.

Commission Hears Argument on Pullman Pooling Plan

The Interstate Commerce Commission this week heard oral argument in the Docket No. 29592 proceeding, wherein a so-called buying group of 57 railroads seeks commission approval of the pooling arrangements involved in the carriers' proposed acquisition of the sleeping car business of the Pullman Company. As noted in *Railway Age*, February 8, page 330, Examiners Hosmer and Barber have recommended that the I. C. C. approve the pooling arrangements.

Jacob Aronson, vice-president, law, of the New York Central, and H. L. Walker, general attorney of the Southern, argued that "better service and economy of operation" will result from the proposed pooling plan. After reviewing events leading up to the pending transaction and tracing the history of Pullman's operations, Mr. Walker said that the pooling in no way would be monopolistic, favor the larger roads or "oppress" the smaller carriers.

Mr. Aronson contended that the proposed pooling offers more advantages to the railroads than the present set-up. He said further that it would be "unfeasible" to have each road operate and maintain its own sleeping car service or have an outside agency acquire Pullman's sleeping car business.

Otis & Co., together with the Department of Justice and the Chesapeake & Ohio and its affiliated roads, have intervened in the proceedings in opposition to the carriers' plan. Attorneys representing the Anti-trust Division of the Justice Department argued that the commission should either dismiss the pooling proposal on the basis that it is not within its jurisdiction under sections 5(1) or 5(2) of the Interstate Commerce Act or approve it subject to the anti-trust laws, from which actions under those two sections of the act are exempt. They contended that the railroads have failed to demonstrate how the proposed pooling would result in better service or economy in operation, adding that, in the opinion of the anti-trust lawyers, the pooling would result in "restrained competition." The contentions of the department later were described as "inconsistent" by Mr. Aronson.

A. C. Wiprud, a former Anti-trust Division attorney, now representing Otis & Co., which also had sought to acquire Pullman's sleeping car business, told the commission that the pooling arrangement would give the railroads a "complete monopoly" in the sleeping car business. He said that the I. C. C. should find that approval of the transaction would restrain competition.

H. A. Wilmarth, representing the Order of Railway Conductors, asked the commission to impose the usual employee-protection conditions for approximately 2,600 Pullman conductors should it approve the pooling arrangement. He said that the O.

of R. C. supports neither the railroads nor the protestants in the proceeding. Asserting that the Pullman conductors should be permitted to transfer to the various railroads and maintain their seniority should the pooling arrangement be approved, he said that there was "no assurance" that the railroads would welcome them.

Car-Allocating Authority in Extended War Act

Authority with respect to "allocations of the use of transportation equipment and facilities by rail carriers" is included in a recently-enacted bill, S.931, providing for extension until June 30 of a limited number of the Presidential powers contained in the Second War Powers Act which expired on March 31. The legislation was approved by President Truman on March 31.

Explaining the measure in a House speech, Representative Walter, Democrat of Pennsylvania, said that "the shortage of freight cars is probably the worst in the capital-goods field." He also pointed out that "present requirements in terms of cars are even greater than during the war."

I. C. C. Holds Hearing on Eastern Fare Hike

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June, 1942. "Net income of the Eastern district railroads in January was less than $900,000," he added. "Seventeen out of the 50 railroads in that district, not including the Canadian Pacific lines in Maine and Vermont, were in the red for the month to the extent of $6,870,000."

Pointing out that passenger revenues for the first two months of 1947 averaged less than $40,000,000 per month, as compared to the all-time high of $65,000,000 per month in 1944, Dr. Parmelee remarked that "one-third of the high passenger revenue enjoyed in the war years has already been lost and there is little evidence that the downward trend has yet run its course." He said that the monthly trend in passenger-miles "corresponds closely" to that in passenger revenues.

Asserting that upward revisions in wage rates have a "pronounced effect" on railroad net earnings, Dr. Parmelee said that 30,000 fewer employees in 1946 than in 1944 earned $132,000,000 more in compensation. He said that the 1946 wage bill of Eastern district and Pocahontas region roads was the "highest on record."

The witness said that the net working capital of the Eastern district roads declined from $475,000,000 at the end of 1945 to $292,000,000 in January, 1947, while similar figures for the Pocahontas region showed a drop from $75,000,000 to $42,500,000. At the same time, he observed that annual operating costs of Eastern district roads have been increased by $917,383,000 since 1940, while costs in the Pocahontas region have gone up $100,102,000.

Estimates for Seven Roads — Dr. Parmelee said that the 1947 net railway operating income for the seven largest roads in the Eastern district is estimated at $133,000,000, an increase of 40.9 per cent over 1946, with the net income, after fixed charges, estimated at $18,100,000, compared with a deficit of $8,600,000 in 1846.

"It will be noted," he said, "that the net railway operating income of all Class I roads in the Eastern district in 1946 was $146,000,000 and the net income after charges was less than $1,000,000. If the increase of 40.9 per cent in net railway operating income estimated by the seven large roads for 1947 is representative of the situation for all Eastern railroads, they would have a net railway operating income in 1947 of about $206,000,000. After deducting fixed charges, a net income of about $60,000,000 would result for the year, a figure less than in any year since 1939. The rate of return on depreciated investment would be about 2⅛ per cent."

As compared with 1946, Dr. Parmelee said the same seven roads in 1947 estimate an increase of 4.5 per cent in freight ton-miles and a decrease of 26.4 per cent in passenger-miles; an increase in freight revenues of about 17.2 per cent and a decrease in passenger revenues of 26,7 per cent; and respective increases of 12.4 per cent and 1.2 per cent in other revenues and operating expenses.

Passenger Traffic Prospect—"The prospects of passenger traffic in 1947 are for a decline of more than 25 per cent below 1946," the witness continued. "That means a prospective loss in passenger revenues in the Eastern district of something more than $150,000,000. When passenger business is on the downward trend, traffic tends to decline more rapidly than do car-miles and train-miles. In other words, passenger revenues decrease faster than the items representing passenger costs. The deficit in passenger operations in 1947 seems almost certain to be greater than that experienced in 1946 and quite probably will exceed that of any prior year of record, and by a substantial margin."

Dr. Parmelee also produced additional evidence which showed, among other things, that (1) railroad expenditures would have been greater in 1946 had more steel been available for the construction of new freight cars on order; (2) railroads in the Eastern district averaged 5 fewer passenger per car and 36 passengers less on a per-train basis in 1946 as compared to 1944; (3) between 1944 and 1946, Eastern district passenger-miles decreased 24.8 per cent, car miles 8.1 per cent and train miles 6.6 per cent, resulting in a "manifest" effect on the margin between revenues and expenses; (4) the average rate of dividends on capital stock of Eastern district roads has been less than 2½ per cent yearly since 1931; and (5) while the net income of incorporated business in 1946 was at its highest point, 106.9 per cent above 1940, the net income of Eastern railroads declined 64 per cent during the same period.

"Emergency" — Dr. Parmelee was followed by W. S. Franklin, vice-president, traffic, of the Pennsylvania, who urged the I. C. C. to approve the increase in order to alleviate "what amounts to an emergency situation." Mr. Franklin said that the P. R. R. had deficits of $9,790,000 in the first two months of 1947, following a deficit of first in which the P. R .R. showed a $8,530,000 in 1946. The latter year, according to Mr. Franklin, was the first in which the P. R. R. showed a deficit.

According to the witness, the P. R. R.'s operating costs have increased approximately $267,640,000 per year since January 1, 1940. Adding that the costs have been partially off set to the extent of $112,800,000 yearly by the recent freight rate increase and the 1942 basic passenger fare increase of 10 per cent, "that," Mr. Franklin said, "leaves $154,840,000 to be absorbed through further economies and technological improvements—an impossible task."

Mr. Franklin said that the Pennsylvania's passenger revenues will be increased by $14,500,000 per year, including $1,000,000 in commutation fares, if the proposed rate increase is approved. At the same time, however, he said that the road's 1947 passenger business, even with the requested increase, will not only fail to pay its own way, but will contribute nothing to taxes, rentals, interest on debt, and the general overhead of the company.

To Reduce Service—"To obtain this result," he continued, "it will be necessary to further reduce train operations, including certain trains on branch lines which are now being held in service by orders from state public utility commissioners. These orders will have to be rescinded before we can accomplish the net results indicated. This presents a very serious problem, because it is our purpose to have each department of railroad service carry its share of the load and produce some net income toward a return on the investment in the property."

With respect to wage increases, Mr. Franklin said that "wages took $38 out of every $100 of revenue in 1942, as compared with $55 in 1946, an increase of 44 per cent." He added that the costs of materials and supplies also have risen 60 per cent from 1940 to 1946.

"After World I a new passenger train cost approximately $257,000, including 10 cars and a locomotive, whereas today a through passenger train of 15 cars and a locomotive costs $1,655,000," he said. "The all-steel coach built after World War I cost $21,000. Today a modern coach with air-conditioning will cost about $90,000. In spite of this enormous increase in cost, the seating capacity has been reduced from 84 to 44 passengers, and the rate of fare from 3.6 to 2.2 cents

per mile. The economics of this situation would be rather difficult to explain. A steam locomotive which cost $44,000 in 1920 . . . now costs $282,000 and a Diesel-electric locomotive to meet the requirements of passenger train operation today would cost $600,000." Mr. Franklin said that the Pennsylvania currently has 395 passenger cars and 39 Diesel-electric locomotives on order.

Mr. Franklin also asserted that a principal factor in the drop of the P. R. R.'s passenger volume was the decline in military and furlough travel, which, he said, produced $96,000,000 of the $259,000,000 gross passenger revenues in 1945, as compared with an estimated $11,000,000 or $12,000,000 in 1947.

Air Lines Got Quick Action—"We believe that the competition with the air lines will increase and the subsidies, both direct and indirect, will make this competition very difficult," he continued. "I might say that this competition with air lines is tough in more than one way. As you are aware, the air lines filed an application for a 10 per cent increase in their passenger fares with the Civil Aeronautics Board on March 17, nearly three weeks after this [railroad] petition was filed. They received a decision from the board authorizing the increase on March 21, just four days later, with authority to make the proposed increases effective on seven days' notice. . . . We sincerely hope the . . . commission may keep this record in mind in connection with the present petition, where the facts are overwhelmingly in favor of the need for further revenue for the Eastern railroads."

Mr. Franklin's contentions were similar to those expressed by other railroad officers, including H. E. Simpson, vice-president, traffic, of the Baltimore & Ohio; F. H. Baird, general passenger traffic manager, and J. D. Hagerty, chief statistician, respectively, of the New York Central system; and F. J. Wall and G. T. Carmichael, vice-presidents of the N. Y. N. H. & H., all of whom produced statistical evidence in support of the proposed increases. The increase also was supported by S. H. Williams, manager, transportation bureau, Chamber of Commerce and Board of Trade, Philadelphia, Pa.

Effect on Volume—"It is evident that the proposed increase in railroad fares is very moderate," Mr, Baird said in part. "It was destined to produce the greatest possible volume of traffic thus resulting in the best financial return to the railroads that it was possible to achieve under present conditions. Certainly the increases proposed, in and of themselves, or percentagewise, are less than almost any other increase in prices which the public has experienced in recent years. . . .

"It is a matter of common knowledge that the bus operations have sustained increased costs. This increasing wage and price level is affecting all forms of transportation. The bus operators are no exception. It is also more expensive to purchase and operate a private car now than it was prior to the war. It also is well-known that the automobile industry is still far short of meeting the demand for new cars. On the other hand, the increasing traffic . . . makes it more burdensome to use a car between large cities such as those served by the Central and other eastern railroads. I hardly think that the very modest increases which will result from our proposal will be the determining factor as to whether a person will use the railroad or use some other form of transportation."

Mr. Simpson estimated that the B & O.'s passenger revenues for 1947 would be $25,000,000 or 7.1 per cent of its total transportation revenues, as compared with $48,215,829 or 13.7 per cent of the total in 1945. He said revenues from military travel would probably decline from 38 per cent of total revenues in 1943 to 14 per cent in 1947, adding that the B. & O. transported 149,000 military personnel in organized movements in January, 1946, as compared with 10,000 in January, 1947.

Buses in Same Boat—Mr. Simpson said he believed the motor bus industry will eventually find it necessary to seek increases similar to those requested by the Eastern railroads for coach transportation. "The motor bus industry finds itself in the same position as the rail carriers; that is, with general operating expenses increased over 50 per cent since 1940, it has only had a 10 per cent increase in passenger fares, and in some instances not even that much," he said in part, adding that the increase in railroad fares will not result in a loss of passengers to the extent that it will deprive the Eastern carriers of the benefits they are seeking.

"We are merely facing the fact that with the unusual increases which have taken place in our operating expenses, the present basic fares are not adequate to cover the present cost of operation, and with the national income and the economy of the country as a whole on a very high level, and increased cost of service on competing forms of transportation, there is every reason to believe that in these times the traffic will bear the moderate increases in fares which we are now seeking," Mr. Simpson said.

According to Mr. Wall, the New Haven's expected revenue increase from New York intrastate travel, other than commutation, will approximate $336,000. At the same time, he said, "if New York intrastate coach fares were not increased, and the New Haven was deprived of the $336,000 per year of anticipated added revenue from New York intrastate coach travel, and in addition was deprived of $99,000 per year of the anticipated added revenue to be secured from interstate coach travel passengers moving to and from New York City, the added revenue which we expected to secure from the increased coach fares would be reduced from $4,775,000 to $3,449,000, a reduction of 28 per cent," he said. "Any such reduction in the anticipated added revenue to be secured from the increased passenger fares would make it necessary for the New Haven to seek a further increase in its interstate passenger fares."

Question Intrastate Orders—Among those voicing objections to the proposed increases were Emanuel Schwartz, a Pelham, N. Y., attorney, and J. J. Doran, assistant counsel for the Public Utilities Commission of the State of New York. Mr. Schwartz contended that increased fares on the New Haven would divert a large portion of that road's passenger business to other forms of transportation, notably bus and vehicle. Mr. Doran expressed the desire to cross-examine the N. Y. C. and New Haven witnesses following a study of their testimony. At the same time, he filed a motion to dismiss the carriers' petition in so far as it sought to modify a 1930 order of the I. C. C. pertaining to intrastate fares in New York state.

The carriers' approach to the intrastate rate phase, with respect to those states where such rates are now held in line with the interstate scale by section 13 orders issued by the commission in past proceedings, was to ask the commission to modify such outstanding orders in a way which would make them applicable to the proposed increase. Thus no applications have been filed with the utility commissions of such states, which include New York, Ohio, Illinois and Michigan. Mr. Doran contended that the carriers' intrastate proposals should have been filed with all state commissions.

Commissioner Rogers, who presided at the hearing, said that the motion would be ruled upon by the I. C. C. on or before May 1. He also requested counsel to furnish memoranda with respect to matters pertaining to Section 13 orders affecting intrastate rates in New York, Ohio, Illinois and Michigan. Commissioner Rogers indicated that the latter issues also would be argued on April 17.

Senate Approves O'Neill for National Mediation Board

The Senate on March 27 confirmed President Truman's recent appointment of Francis A O'Neill, Jr., to membership on the National Mediation Board for a term expiring February 1, 1950. The nomination had been reported favorably on the previous day from the Senate committee on education and labor.

As noted in the *Railway Age* of March 15, page 570, Mr. O'Neill, a resident of New York City and a Republican, has been chief trial examiner of the New York State Labor Relations Board since April, 1946. On the N.M.B. he succeeds H. H. Schwartz who retired on February 1; and there still remains a vacancy created by the retirement last June of George A. Cook, who left in the middle of a term which was scheduled to expire February 1, 1948.

Mr. O'Neill was born in New York on April 3, 1908, and was graduated

from Fordham University with a B.A. degree in 1929. He received an LL.B from the same institution in 1932, and for the following six years he practiced law in New York. In 1939, he joined the staff of the New York State Labor Relations Board as review attorney and was successively promoted to trial attorney and trial examiner. From January, 1943, until December, 1945, Mr. O'Neill

Francis A. O'Neill, Jr.

served in the Navy with the rank of lieutenant, being assigned as labor relations officer for the Tri-State Area (Southern Ohio) Naval District. Upon his discharge from the service, he returned to the New York board and in April, 1946, he became its chief trial examiner, the position he was holding at the time of his appointment to the N.M.B.

Will Investigate R. F. C. Loans

Plans of the Senate committee on banking and currency to investigate railroad loans made by the Reconstruction Finance Corporation were revealed this week with the publication of a letter which the chairman of that committee, Senator Tobey, Republican of New Hampshire, had written to Chairman Charles B. Henderson of the R. F. C. regarding the extension until 1965 of the latter's $80 million loan to the Baltimore & Ohio. The Tobey letter was published on April 1, and Mr. Henderson issued a statement saying that on the same day the R. F. C. made a "full report" on the matter to the committee.

Mr. Henderson also made public a telegram which R. F. C. had received from R. L. Snodgrass, vice-president of the B. & O.

Mr. Snodgrass said: "With respect to your astonishing message that Senator Tobey has asked R. F. C. to attempt to delay mechanical steps incident to evidencing adjustments of claims of creditors affected by Baltimore & Ohio adjustment plan, I call to your attention the following facts: (1) Plan was approved by a special United States district court; (2) certiorari was denied by the Supreme Court of the United States which court denied rehearing in October, 1946; (3) notices of exchange of bonds have been published in accordance with court's decree; (4) the company and all affected creditors, including R. F. C., are bound by court's decree which must be carried out in accordance with its terms."

Mr. Snodgrass pointed out further that the readjustment plan was announced "over two and one-half years ago," and he asserted that "it was received with widespread approval and acclaim, almost 100 per cent" of the voting creditors having accepted it. "The charges of a disgruntled former officer of the company," he added, "were found by the court to be groundless and a senatorial investigation, suggested in an inspired letter, addressed to your corporation by a former senator, was forgotten when the facts were called to his attention."

Mr. Tobey's letter told Mr. Henderson that information filed by the R. F. C. with the committee indicated that "the largest and longest outstanding loan to a major railroad is that of some 80 million dollars to the Baltimore & Ohio, which loan is past due, having matured in 1944."

"That information," the senator continued, "also indicates that three former R. F. C. officials now hold good positions in the control of the B. & O., and that R. F. C. has agreed to buy some 80 million dollars of new B. & O. collateral trust bonds on which payment of the principal amount will not be due until 1965. Although this transaction is cast in the form of a bond purchase agreement, it is simply in substance a device to extend the existing R. F. C. loan to the year 1965. Such an extension is clearly illegal and in violation of section 3 of the R. F. C. act. . . .

"The R. F C, as a government agency created by Congress, is expected to obey both the spirit and letter of the laws enacted by Congress if it is to maintain the confidence and approval of the Senate committee on banking and currency

"In view of the foregoing, which represents conclusions I have reached as stated, it would seem incumbent on me as chairman of the banking and currency committee to request that the R. F. C. should not carry out the transaction contemplated under the present B. & O. reorganization until after you and your directors have conferred with the banking and currency committee and I shall be glad to make an opportunity for such a conference at your convenience."

Two More Cases Involving Rail and Water Competitive Rates

Two more proceedings involving investigations of competitive rail and water rates have been instituted by the Interstate Commerce Commission and assigned for hearing before Chairman Aitchison at Washington, D. C., on April 28. They are No. 29721, All-Rail Commodity Rates between California, Oregon, and Washington; and No. 29722, Pacific Coastwise Water Rates.

As it did with respect to the three other pending proceedings of similar character, the commission has directed the respondent railroads and water carriers to submit proposals for adjustment of the competitive set-up in the form of rates which they are prepared to defend as just and reasonable, and to confer for mutual consideration of such proposals. The commission "directive" further requires that the proposals be made public for the information of interested shippers not later than April 17.

Representation of Employees

The National Mediation Board has certified the Brotherhood of Railway Clerks to replace the United Transport Service Employees of America, Congress of Industrial Organizations, as the representative of clerical, office, station and storehouse employees of the Memphis Union Station Company. In a recent election, the clerks defeated the C.I.O. union, 65 to 55.

Equipment and Supplies

LOCOMOTIVES

The CHICAGO, INDIANAPOLIS & LOUISVILLE has ordered 15 1,500-hp. Diesel electric road-type switching locomotives, 7 of which will be built by the American Locomotive Company, 6 by the Electro-Motive Division of the General Motors Corporation and 2 by Fairbanks, Morse & Co.

The CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC has ordered four 2,000-hp. Diesel-electric locomotives, A units, from Fairbanks, Morse & Co.

The KANSAS CITY SOUTHERN has ordered four 2,000-hp. Diesel-electric locomotives, A units, from Fairbanks, Morse & Co.

FREIGHT CARS

The report in last week's *Railway Age* that the FRUIT GROWERS EXPRESS COMPANY had ordered 500 40-ton refrigerator cars from the American Car & Foundry Co. was erroneous.

MARINE

The directors of the CHESAPEAKE & OHIO have authorized the purchase of two 1,000-hp. tugboats, for which competitive bids will be asked. Each of the boats, it was estimated, will cost $450,000. They will be used to augment one 750-hp. and three 1,000-hp. tugs now in service at Newport News, Va., and Hampton Roads.

SIGNALING

The ELECTRO-MOTIVE DIVISION of the General Motors Corporation has ordered 10 sets of intermittent inductive train control equipment from the General Railway Signal Company. Six sets are for installation on Diesel-electric passenger locomotives for the Pere Marquette, and 4 sets are for Diesel-electric freight and passenger locomotives for the New York Central System.

The BOSTON & MAINE has ordered a

160.11-megacycle train communication system from the General Railway Signal Company for use in a yard near Mechanicville, N. Y. Five locomotive equipments and a wayside station will be used.

Domestic Equipment Orders Reported in March

Domestic orders for 10 Diesel-electric and 10 steam locomotives, 18 passenger-train cars and 13,800 freight cars, including 650 ordered by private car lines and industrial companies, were reported in the *Railway Age* in March. The estimated cost of the locomotives is $4,500,000. The passenger-train cars will cost approximately $1,800,000 and the freight cars will cost an estimated $53,820,000. Of the 13,150 freight cars ordered by railroads, 100 will be built in railroad shops. The 650 freight cars ordered by private car lines will be built in company shops. The accompanying table lists the orders in detail.

During the first three months of 1947, the *Railway Age* has reported domestic orders for 79 Diesel-electric, 10 steam, 1 gas turbine and 4 electric locomotives (costing an estimated $30,700,000), 30,043 freight-train cars (at an estimated cost of $117,170,000), and 138 passenger-train cars (the estimated cost of which is $14,025,000).

Orders placed in this country and abroad by foreign railroads for 151 Diesel-electric and 29 steam locomotives, 63 passenger cars and 10,945 freight-train cars were reported in the *Railway Age* during the first three months of this year. These orders also are listed in detail in an accompanying table.

Car Service

I. C. C. Service Order No. 396, which requires reconsignment of refrigerator cars within 48 hours from 7 a.m. after arrival at a diversion point, has been modified by Amendment No. 5 which adds a new paragraph providing that railroads "shall, on request of original shipper by endorsement on the bill of lading, after arrival of a car subject to this order at the first reconsigning point where such car is held, immediately send notice of arrival of the car at such point by collect telegram to the shipper, or such agent as he may designate in the endorsement on the bill of lading, at any point specified in the bill of lading endorsement." The new provision does not change the computation of time in the order, "nor does it authorize or require the sending of the arrival notice . . . to anyone but the original shipper or such designated agent."

I. C. C. Service Order No. 647 (revised), which maintains the priorities setup for foreign-relief grain offered for loading at points in Oregon, Washington, Idaho, and western Montana, has been modified by Amendment No. 1, which changes the weekly car quotas of the originating roads. The order now requires such roads to give preference in car supply to the priority traffic to the extent of weekly quotas of box cars as follows: Union Pacific, 450; Northern Pacific, 210; Great Northern, 48; Chicago, Milwaukee, St. Paul & Pacific, 24; Spokane, Portland & Seattle, 18.

I. C. C. Service Order No. 87, which modifies the free time allowed on tidewater coal and coal products at north Atlantic ports, has been extended by Amendment No. 8 which sets back the expiration date from May 1 until August 1.

The Office of Defense Transportation revised, effective April 1, its General Order 16-C, which maintains export controls. The principal revisions were embodied in General Permit 1-A, and General Permit 2 was revoked, thereby exempting export coal and coke, in bulk, from requirements of the order. Meanwhile General Permit 1-A now requires shippers to certify on shipping documents covering the rail transportation of overseas freight, the steamship contract number, the name of the vessel, the steamship agent at the port of export, and the first date the steamship company will accept such shipment, at the port of export, or the name of the storage facility if the cargo is to be placed in storage within the port area, whichever is applicable. General Permit 1-A has been further amended to require permits for all flour, except that shipped by the Department of Agriculture, when moved through north Atlantic ports, from origins west of but not on the Mississippi river.

The Office of Defense Transportation has issued Special Allocation Order ODT R-2 effective April 1, allocating the use of 423 liquefied petroleum gas tank cars which the War Department has declared surplus. The cars have been in the service of commercial companies for some time, and the Civilian Production Administration had directed the War Assets Administration to sell them "to the persons and in the quantity designated" by O. D. T. Due to litigation now pending, the Department of Justice has advised that the cars may not be sold while the validity of the sale is thus being contested. Under the provisions of the allocation order the cars will be assigned as follows:

Anchor Petroleum Company	31
Ashland Oil & Refining Company	4
Barnsdall Oil Company	15
Cumberland Gasoline Corporation	20
Hagy, Harrington and Marsh	8
Phillips Petroleum Company	24
Shell Oil Co., Inc.	11
Sinclair-Prairie Oil Company	100
Skelly Oil Company	59
Sun Oil Company	25
Warren Petroleum Corporation	126

"At the present time," the O. D. T. allo-

Foreign Equipment Orders—First Quarter of 1947

Date	Purchaser	No.	Type	Builder
			Locomotives	
Jan. 11	Leopoldina	8	2-8-2 frt.	Baldwin
Jan. 25	India	16	4-6-2 pass.-frt.	Baldwin
Feb. 8	Soviet Union	5	0-6-0	Dav.-Besler
March 1	Argentine State Rys.	60	1,300-hp. D.-E.	Whitcomb
		30	1,950-hp. D.-E.	Whitcomb
March 8	Canadian National	18	1,000-hp. D.-E. sw.	Electro-Motive
		10	1,000-hp. D.-E. sw.	American
		18	600-hp. D.-E. pass. frt.	Canadian Loco.
		2	380-hp. D.-E. pass. frt.	General Electric
March 29	Canadian Pacific	13	1,000-hp. D.-E. sw.	American
			Freight Cars	
Feb. 1	Paulista	1,000	Box	Pullman
		1,000	Gon.	Amer. Car & Fdy.
		1,000	Flat	Pressed Steel
March 22	Canadian National	1,500	50-ton Box	Canadian Car & Fdy.
		500	50-ton Auto	Canadian Car & Fdy.
		250	50-ton Ore	Nat'l Steel Car
		150	70-ton Cov. Hopper	Nat'l Steel Car
		500	50-ton Box	Nat'l Steel Car
		1,700	50-ton Box	Eastern Car
March 22	Canadian Pacific	1,750	50-ton Box	Canadian Car & Fdy.
		750	50-ton Box	Nat'l Steel Car
		120	50-ton Auto	Nat'l Steel Car
		100	70-ton Cov. Hopper	Nat'l Steel Car
		325	50-ton Refrig.	Nat'l Steel Car
		250	70-ton Hopper	Eastern Car
		50	Caboose	R. R. Shops
			Passenger Cars	
March 8	Central of Brazil	63	Various	Budd

Locomotives

Date	Purchaser	No.	Type	Builder
March 15	C. & O.	5	4-8-4 pass.	Lima
		5	4-6-4 pass.	Baldwin
March 15	C. I. & L.	1	3,000-hp. D.-E. pass.	Electro-Motive
		1	1,500-hp. D.-E. B-type	Electro-Motive
		1	1,500-hp. D.-E. rd. sw.	American
March 29	Southern	3	6,000-hp. D.-E. frt.	Electro-Motive
		4	1,500-hp. D.-E. sw.	Electro-Motive
			Freight Cars	
March 8	S. A. L.	300	70-ton Hopper	Pullman-Standard
March 8	S. P.	1,500	50-ton Gondola	Pressed Steel
		500	50-ton Auto	Pressed Steel
		500	50-ton Gondola	Ralston
		100	70-ton Cov. Hopper	General American
		1,500	50-ton Box	Amer. Car & Fdy.
		1,500	50-ton Box	Pullman-Standard
March 15	C. I. & L.	100	70-ton Hopper	General American
March 15	Ill. Central	500	50-ton Hopper	Amer. Car & Fdy.
		500	50-ton Hopper	General American
March 22	N. Y., N. H. & H.	1,000	50-ton Box	Pullman-Standard
March 22	S. P.	500	70-ton Flat	Amer. Car & Fdy.
		100	70-ton Gondola	R. R. Shops
March 29	A. T. & S. F.	500	50-ton Auto	Pressed Steel
March 29	Belt of Chic.	50	70-ton Hopper	General American
March 29	Cudahy Packing	150	40-ton Refrig.	Co. Shops
March 29	Fruit Growers Exp.	500	40-ton Refrig.	Co. Shops
March 29	Southern	3,000	50-ton Box	Pullman-Standard
		1,000	50-ton Hopper	Amer. Car & Fdy.
			Passenger Cars	
March 1	C. & O.	10	Bag.-Mail	Pullman-Standard
		8	Post Office	Pullman-Standard

cation announcement said, "there is a critical shortage in the supply of tank cars suitable for the transportation of liquefied petroleum gas. The purpose of allocating the use of the 423 tank cars is to secure maximum transportation efficiency in the continued operation of the cars in liquefied petroleum gas service."

Supply Trade

Pullman, Inc., Income Over $2 Million Last Year

Net income of Pullman, Inc., in 1946 totaled $2,079,110, after placing in suspense an adjusted net profit of $1,258,323 from operation of the sleeping car subsidiary, compared with $13,890,226 in the preceding year, according to the annual report. The backlog of orders on the books of the Pullman-Standard Car Manufacturing Company, a subsidiary, amounted on February 1 to $263,000,000, the largest peacetime total in its history, the report said, adding that it appears material supply will still be a limiting factor in production for the next several months.

U. S. Steel's Long Term Debt Lowest in History

Long term debt of the United States Steel Corporation at the end of 1946 amounted to $87,521,601, the lowest in its history, Irving S. Olds, chairman, said in the recently released annual report. The total of debt was $5,194,629 less than at the end of the preceding year. Net income for 1946 totaled $88,622,475, compared with $58,015,056. Current assets at the end of the year were $954,639,288, compared with $817,760,584. Current liabilities were $325,560,350, compared with $217,000,332.

The **Superheater Company** of Chicago has announced the following appointments: **P. D. Blanchard, S. L. Brownlee,** and **L. R. Bryan** as district representatives in charge of sales and service; **F. C. Widmayer** as special representative. All have headquarters at Chicago.

The **Pittsburgh Plate Glass Company** has announced that work on a $385,000 addition to the Duplate department, at Creighton, Pa., will be started early this month.

The **Carboloy Company,** Detroit, Mich., has announced the appointment of **Paul H. Holton,** formerly sales engineer in the Philadelphia, Pa., area, as manager of its Atlantic district office at Newark, N. J., to succeed **T. D. MacLafferty,** resigned. **Paul Schick,** formerly in the Detroit plant, has been appointed to succeed Mr. Holton at the Philadelphia branch.

Stowell C. Wasson, manager of **National Malleable & Steel Castings Co.'s** two Chicago works at Cicero, Ill., and Melrose Park, has been elected a director to succeed the late Charles H. McCrea.

The **Union Asbestos & Rubber Co.** has announced the acquisition of all the capital stock of the **Carolina Asbestos Company,** which is engaged in the manufacture of asbestos textiles. Carolina Asbestos will continue to operate under the direction of its present management.

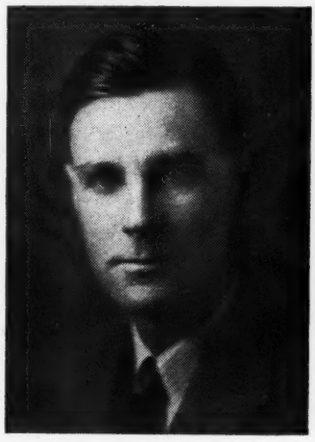
Raymond C. Schleihs has been appointed representative in the northwest territory for the **Hunt-Spiller Manufacturing Corporation** of Boston, Mass.

Edward A. Damrau, formerly in charge of the Pittsburgh, Pa., office of the **Okonite Company,** has been appointed manager of the new branch office in the Chamber of Commerce building, Charleston, W. Va. Mr. Damrau will handle all electrical wire and cable sales in West Virginia and adjacent parts of Kentucky and Virginia, for both Okonite and its Hazard insulated wire works division.

The **Dampney Company of America** has announced the appointment of the **Combustion Equipment & Insulation Co.,** 1900 Euclid avenue, Cleveland, Ohio, as agent in the Cleveland area for the sale of Apexior and Thur-ma-lox protective coatings.

Kennametal Inc., Latrobe, Pa., has announced the appointment of **Lawrence W. Guild,** formerly representative and tool engineer, as manager of the New England district, comprising territories covered by the company's Hartford, Conn., Springfield, Mass., and Boston offices. His headquarters will be at 1537 Main street, Springfield.

A. P. Shearwood has been appointed general sales manager of the **National Steel Car Corporation** of Montreal, Que., and Hamilton, Ont. Mr. Shearwood joined the engineering department of the company



A. P. Shearwood

in 1932 at the Hamilton office. In 1934, he was transferred to the Montreal office and in 1937 was appointed mechanical assistant to the president.

C. F. Hammer, former assistant chief engineer of the **Westinghouse Air Brake Company,** has been appointed to the newly created position of engineering manager in the engineering department at Wilmerding, Pa. Entering the employ of the company in 1924 as special apprentice, Mr. Hammer was later appointed engineer of tests and, in February, 1946, was appointed assistant chief engineer.

The company also has announced the appointment of **W. B. Renshaw** as central district manager, with headquarters in Wilmerding, where he has served as a representative since 1927. Mr. Renshaw joined

C. F. Hammer

Westinghouse Air Brake in 1913 and previously held positions in the commercial engineering and field organizations of the company. **F. H. Logsdon,** former repre-

W. B. Renshaw

sentative in the industrial division of the central district, has been appointed to succeed Mr. Renshaw in the central district.

The **Standard Stoker Company** has announced the approval by its stockholders of a merger with the **Read Machinery Company,** York, Pa., which will be operated as the Read Machinery division. Concurrently, **Charles J. Surdy,** vice-president, export sales, with headquarters at New York, has been appointed vice-president, stoker sales and development; **Joseph B. MacKenzie** has been appointed works manager and chief engineer and **Elmer F. Seibel** has been appointed mechanical engineer at Standard Stoker's Erie, Pa., plant.

The **Borg-Warner Corporation** will acquire on May 1, under the terms of a sales agreement, the Franklin, Pa., steel works of the **Chicago Railway Equipment Company,** it has been announced by C. S. Davis, president of Borg-Warner. It also was announced that Borg-Warner's Pesco products division has begun line

production of hydraulic pumps for industrial use.

George L. Cotter, whose promotion to western manager of **Westinghouse Air Brake Company,** with headquarters at Chicago, was reported in the *Railway Age* of March 15, is a graduate of the University of Michigan and has been associated with the company since 1923. Mr. Cotter served in various capacities in the engineering department and in the general office

George L. Cotter

of the firm until his appointment in 1929 as district engineer for the Pittsburgh (Pa.) district. In 1940 he was appointed commercial engineer, and in 1943 he was advanced to western district manager at Chicago. He was promoted to assistant western manager there in 1945, which position he held until his recent appointment.

Organizations

G. M. Campbell, vice-president of the Baltimore & Ohio, will address the **Chicago chapter, Locomotive & Historical Society,** at its meeting on April 11, at 7:30 p. m., in room 1200, 205 North Wacker drive, Chicago. His subject will be, "History of the B. & O. Chicago Terminal." Members will meet at 6 p. m. for dinner at Harding's Restaurant, 109 West Madison street. The general public is invited to both events.

Railroad freight traffic men of Washington, D. C., have organized the **General Agent's Luncheon Club** to meet each Friday at 12 o'clock. C. Guy White, district freight agent of the Chesapeake & Ohio, was elected executive chairman. Other officers are: L. A. Heatherman, general agent of the Nashville, Chattanooga & St. Louis, vice-chairman; and Vergil M. Perry, district freight agent, Gulf, Mobile & Ohio, secretary-treasurer.

The **Eastern Car Foreman's Association** will meet April 11 at the Engineering Societies Building, New York, to 8 p. m. Eugene Turney, Jr., of the Cherry Rivet Company, Los Angeles, Cal., will give a lecture on "Modern Methods of Fastening" which will be illustrated by slides.

The **Car Department Association of St. Louis** will meet April 15 at 8 p. m. at the Hotel De Soto, St. Louis, Mo. George M. Harrison, grand president of the Brotherhood of Railway & Steamship Clerks will present a paper entitled "The Railroads of 1947."

The **Freight Claim Division of the Association of American Railroads** will hold its 56th annual session at the Statler Hotel, St. Louis, Mo., April 15-17. Col. Robert S. Henry, assistant to president of the A. A. R., will address the meeting on the morning of April 15, and at 12:15 p. m. the St. Louis traffic club will sponsor a perfect shipping month luncheon which will include an address by C. E. Johnston, chairman of the Western Association of Railway Executives.

Harry F. Chaddick, president of Standard Freight Lines, was elected president of the Chicago chapter, **Army Transportation Association,** at its meeting on March 20. Other officers elected, all vice-presidents, are as follows: M. C. Stevenson, district traffic manager, United Air Lines; L. H. Ristow, chairman, National Bus Traffic Association; John H. Van Moss, western sales manager, American Car & Foundry Co.; R. E. Coleman, passenger traffic manager, Baltimore & Ohio; E. J. Goebel, vice-president, Chicago, Duluth & Georgian Bay Transit Co., and Colonel C. C. Sibley transportation officer, 5th Army Headquarters. W. M. Moloney, general agent, passenger department, of the Chicago, Burlington & Quincy, was elected secretary-treasurer. The chapter's new board of directors includes E. P. Burke, passenger traffic manager of the Pullman Company; E. W. Soergel, freight traffic manager of the Chicago, Milwaukee, St. Paul & Pacific, and R. Lamberton, Union Tank Car Company.

The following were elected officers of the **Traffic Club of Chicago** at the fortieth annual meeting and banquet in the Grand Ballroom of the Palmer House, March 27. President, W. R. Cox, freight traffic manager, Pennsylvania; first vice-president, Lee

(*Continued on page 729*)

Overseas

ARGENTINA.—The Argentine government recently purchased, at a reported price of approximately $45,699,000, three French-owned lines within its boundaries. The three roads include the Rosario a Puerto Belgrano (513 miles), Cia. General de Buenos Aires (788 miles) and the Provincia de Santa Fe (1,344 miles.) The first named reported a deficit last year, while the other two roads operated in the black.

CHINA.—A national railway construction program being mapped out in China calls for the construction of 34 new lines totalling 7,392 miles in length. Existing railways in China cover only one-eighth of the country, and it is the aim of the program undertaken to provide every inland center of any importance with either direct or indirect rail contact to a seaport. A second important objective calls for development of international trade across the southwestern boundaries of China, for which completion of the Yunnan-Burma railway within five years is planned. Negotiations have begun, also, between the French and Chinese governments with regard to the future of the railway from Hokow to the coast of French Indo-China at Haiphong, and a free zone for Chinese exports and imports at that port.

GREAT BRITAIN.—Consideration of the government bill to nationalize the railroads and other transportation facilities in Great Britain was scheduled to be taken up in the House of Commons by April 2, the date on which the committee report on the measure was due; discussion of that report in the House was limited to three days and one day has been allowed for disposition of the bill on its third reading. While vigorous opposition to the proposal has been expressed in committee, observers saw no evidence that the Labor party was inclined to change its terms in any material way.

ITALY. — The Italian State Railways have recently released figures which indicate the railroad picture in Italy late in 1946. Figures for that year are compared with 1939, but each section requires consideration of factors other than figures alone. For example, mileage operated would indicate that little of its track capacity had been lost, but no small fraction of this mileage is now operated as single track, where, pre-war, multiple tracks scarcely sufficed to carry the traffic.

	1939-1940	June, 1946
Miles in operation	10,571	9,424
Electrified section	3,206	2,477

Train-mile figures indicate the restrictions imposed by the present condition of track and of such apparatus as signaling systems. Passenger mileage attained, while low in comparison with the 1939-1940 period, indicates far more passengers per car than pre-war, while the freight traffic at present is far short of the requirements of a normal economy.

	First six months—1946	Fiscal Year 1939-1940
Train mileage		
Passenger and mixed traffic	9,961,000	79,035,000
Freight and service traffic	9,573,000	33,588,000
Tons of freight carried	15,931,000	61,666,000
Number of passengers carried	51,298,784	122,475,448

A picture of the condition of equipment is found in the table below, which gives comparative figures. The repair of freight cars is proceeding at a satisfactory rate, but the reconditioning of locomotives is very slow. Construction of new equipment has barely begun.

	1939	1946	
		Available for traffic	Undergoing repair
Locomotives, steam	4,416	2,178	1,941
Locomotives, electric	1,576	888	796
Passenger cars	7,600	1,393	3,789
Freight cars	128,824	84,541	40,631
Baggage & mail cars	4,484	1,236	1,531

Locomotives include steam and electric rail cars.

QUEENSLAND.—An air-conditioned, all-steel, 13-car train is being designed for

the Brisbane-Cairns section of the Queensland Railways. The facilities of the train, which will accommodate 71 first-class and 77 second-class passengers, include sleeping and daytime accommodations for all passengers, a dining car, a buffet car providing 24-hour service, and shower stalls in two of the sleeping cars. Sections in the day coaches in both classes will be set aside for the use of mothers traveling with small children. A special car in the train will generate current for the air-conditioning equipment.

RUSSIA.—Information has come out of Russia of plans for the technical training of a large number of personnel for the Soviet railroads. The total number to be trained or retrained in the latest scientific and technical methods will be around 1,000,000 persons over a five-year period, and a special fund to meet the expense has been set aside by the state for this purpose. Trainees will receive free tuition and will be maintained entirely by the government.

Railway and industrial training schools are expected to increase their yearly output of graduates from the 56,000 achieved in 1945 to 197,000 in 1950. Altogether, these schools are expected in the next five years to train 624,000 skilled workers.

Financial

AKRON, CANTON & YOUNGSTOWN.—*Annual Report.*—Operating revenues of this road in 1946 were $4,215,287, compared with $4,286,005 in the preceding year. Operating expenses totaled $3,234,225, compared with $3,227,857. Net income was $188,558, compared with $245,896. Current assets at the end of the year amounted to $1,454,225, compared with $1,581,980. Current liabilities were $986,312, compared with $969,155. Long term debt was $4,000,030, compared with $4,100,630.

Because of the increase in freight rates and the unprecedented volume of peacetime tonnage available, H. B. Stewart, Jr., president, said in the report, the earnings prospects for 1947 are unusually good. He estimated that the rate increase will add about $700,000 to freight revenues. It is therefore anticipated that the preferred stock dividend requirement will be met and that a modest dividend on the common stock may be initiated.

ALLEGHANY CORPORATION.—*Annual Report.*—Net income of this company last year was $1,665,925, exclusive of security transactions. Interest payments of $655,727 were received during the year on bonds of railroads in reorganization. If this amount had been credited as income and additional federal taxes accrued, instead of being applied to the cost of securities as allowed by tax law, the net income would have been $2,161,035. In 1945 net income amounted to $1,470,279, exclusive of $2,444,151 received as interest payments on bonds of roads in reorganization. The market value of the corporation's assets on December 31, 1946, was $81,094,057 and the stockholders' net equity in these assets was $55,740,740.

During 1946 Alleghany sold various securities for a total of $17,087,744, realizing a net profit of $2,007,597. The largest single transaction was the $5,334,340 sale of 105,400 shares of Chesapeake & Ohio at a profit of $1,360,486. Securities purchased during the year cost $24,567,076, including $6,482,826 of federal government obligations and $4,167,537 of New York Central common stock. The latter subsequently was sold to the C. & O.

BALTIMORE & OHIO.—*Equipment Trust Certificates.*—This road has sold, subject to Interstate Commerce Commission approval, $5,650,000 of Series T equipment trust certificates to Halsey, Stuart & Co. and associates on a bid of 99.276 for an annual interest rate of 1⅞ per cent. The certificates were reoffered to the public at prices yielding from 1.10 per cent to 2.15 per cent, according to maturity. (See the *Railway Age* of March 29.)

CANADIAN PACIFIC.—*Preliminary Annual Report.*—Gross earnings of this road in 1946 amounted to $292,495,828, compared with $316,109,358. Working expenses, including taxes, totaled $271,652,778, compared with $280,055,024. Fixed charges were $18,488,113, compared with $19,547,129. Net income was $25,134,731, compared with $31,614,162.

CHESAPEAKE & OHIO.—*Equipment Trust Certificates.*—This road has applied to the Interstate Commerce Commission for authority to assume liability for $1,650,000 of equipment trust certificates, the proceeds of which will be applied toward the purchase of four 2-8-4 type freight locomotives, at $228,172 each, and five 2-8-4 type freight locomotives, at $235,672 each, from the American Locomotive Company. The certificates would be dated May 1 and would be sold on the basis of competitive bidding.

CENTRAL OF NEW JERSEY.—*New Director.*—Robert A. Young, president of the Lehigh Valley Trust Company, Allentown, Pa., has been elected a director of this road to succeed John R. Prizer, resigned.

CHICAGO, BURLINGTON & QUINCY.—*Trackage Rights.*—Division 4 of the Interstate Commerce Commission has authorized the modification of an operating agreement, dated August 5, 1913, and modified August 1, 1933, under which this road operates over the Baltimore & Ohio Southwestern, of which the Baltimore & Ohio is lessee, between Shattuc, Ill., and East St. Louis. Under the terms of a supplemental agreement, effective August 1, 1946, the rental charges paid to the B. & O. were increased on the basis of signal and line improvements since 1933 and because of increases in costs of track maintenance and the operation of appurtenant facilities.

CHICAGO & WESTERN INDIANA.—*Annual Report.*—Operating revenues of this road in 1946 were $139,754, compared with $158,892 in the preceding year. Operating expenses were $336,227, compared with $400,514. Fixed charges were 2,767,962, compared with $2,806,703. Net income was $295,739, compared with $219,142. Current assets at the end of the year were $4,173,000, compared with $4,128,751. Current liabilities were $2,926,173, compared with $2,555,749. Long term debt was $79,747,880, compared with $79,714,537.

DELAWARE & HUDSON.—*New Director.*—Glenn H. Caley, vice-president and general manager of this road, has been elected a director to succeed Charles S. Weston, resigned.

DENVER & RIO GRANDE WESTERN.—*Reorganization.*—The Interstate Commerce Commission has granted the necessary authorizations to enable this road's reorganization committee to carry out the commission- and court-approved plan of reorganization under section 77 of the Bankruptcy Act. The commission's decision, dated March 26, was embodied in a supplemental report in the road's reorganization proceeding—Finance Docket No. 11002. Among other things it authorizes acquisition by the reorganized company of the debtor's properties, including a merger or consolidation of the Denver & Salt Lake and the Denver & Salt Lake Western with the reorganized company. Also, it approves the issuance of securities and assumption of obligations as provided in the reorganization plan.

DELAWARE, LACKAWANNA & WESTERN.—*Annual Report.*—Operating revenues of this road in 1946 amounted to $69,481,551, compared with $72,245,847. Operating expenses were $58,413,674, compared with $60,676,468. Fixed charges totaled $5,192,557, compared with $6,439,547. Current assets at the end of the year were $21,750,097, compared with $25,479,954. Current liabilities were $8,797,621, compared with $10,668,060. Long term debt was $138,918,732, compared with $121,513,073.

"Business men inform us that there is a continuing demand for goods and that production will depend upon the absence of strikes and improved labor efficiency," William White, president, said in a letter accompanying the annual report. "A disturbing element in the railroad situation may be a demand for increased wages or changes in working rules, or both, at the expiration of the one-year moratorium in May. In the final analysis it would appear that the outlook for 1947 is dependent entirely upon labor. Should production of goods not be curtailed and costs not materially increased, our company may look forward to an improvement in net earnings, but in order to insure an adequate return it is our opinion that there must be some further increases in freight rates and passenger fares. There is, howexer, a limit to which freight rates and passenger fares can be increased because of competition from other forms of transportation that receive financial subsidy at the expense of taxpayers. The railroads welcome fair competition, but they cannot compete successfully with other modes of transportation that receive governmental subsidy. Without an adequate return it is impossible to make those investments for equipment and facilities which tend to reduce costs and keep freight rates and passenger fares at a competitive level."

GULF, MOBILE & OHIO.—*Annual Report.*—Operating revenues of this road in 1946 amounted to $34,933,043, compared with $38,080,031 in the preceding year. Operating expenses were $28,667,427, compared with $30,716,518. Fixed charges totaled $1,034,966, compared with $1,836,014. Net income, after fixed and contingent charges, was $1,533,644, compared with $1,443,810. Current assets at the end of the year were $15,255,275, compared with $19,797,279. Current liabilities were $9,045,856, compared with $10,749,123. Long term debt was $34,319,051, compared with $28,654,910.

INDIANA HARBOR BELT.—*Annual Report.*—Operating revenues of this road last year amounted to $16,379,313, compared with $16,392,133 in 1945. Operating expenses were $16,123,807, compared with $17,093,222. Fixed charges were $503,002, compared with $506,941. The net deficit was $2,937,018, compared with a net deficit of $1,515,628. Current assets at the end of the year totaled $5,838,979, compared with $7,901,209. Current liabilities were $5,757,304, compared with $5,828,948. Long term debt was $9,925,000, compared with $9,125,000.

INTERSTATE.—*Equipment Trust Certificates.*—This road has sold, subject to Interstate Commerce Commission approval, $2,700,000 of series G equipment trust certificates to Harriman Ripley & Co. on the latter's bid of 99.3544 for a 2⅛ per cent interest rate. The certificates, $180,000 of which will mature on each April 15 from 1948 to 1962, inclusive, were reoffered to the public at prices yielding from 1.10 per cent to 2.50 per cent, according to maturity. (See the *Railway Age* for March 15.)

LEHIGH VALLEY.—*Annual Report.*—Operating revenues of this road last year were $67,007,685, compared with $77,732,844 in 1945. Operating expenses were $55,143,234, compared with $70,107,290. Net income was $108,102, compared with a deficit of $7,562,104. Current assets at the end of the year were $24,555,335. Current liabilities were $11,075,904. Long term debt was $94,066,512.

F. R. Gerard, president, said in a letter accompanying the annual report that 1946 brought increased interest in industrial development along the lines of the company. As a result, he added, "sixty-nine companies have or are planning to locate at sites served by it and the estimated new investment in plant facilities . . . is approximately $23,600,000. To serve these new plants a total of 22,178 ft. of side-track was constructed. In anticipation of continued good markets for their products, many of Lehigh Valley's on-line industries announced expansion programs. Thirty-five concerns began such programs last year which, when completed, will represent capital expenditures . . . of about $12,000,000."

LONG ISLAND.—*Annual Report.*—Operating revenues of this road in 1946 totaled $46,164,043, an increase of $1,165,934 over the preceding year. Operating expenses amounted to $36,681,467, an increase of $2,703,205. The net loss was $1,188,075, compared with net income of $857,580. Current assets at the end of the year were $11,066,915, an increase of $850,226. Current liabilities were $8,433,557, an increase of $1,730,448.

MACON, DUBLIN & SAVANNAH.—*Extension of Bonds.*—Division 4 of the Interstate Commerce Commission has authorized this road, a subsidary of the Seaboard Air Line, to extend from January 1, 1947, to January 1, 1972, the date of maturity of not exceeding $1,733,000 of its first mortgage 40-year 5 per cent gold bonds. The commission did not adopt that recommendation of the proposed report (by Examiners H. C. Howard and F. E. Grutzik) which suggested that approval of the extension be conditioned on a guarantee of the bonds by the Seaboard and that, on the basis of such guarantee, the interest rate be reduced from 5 to 4 per cent. (See *Railway Age* of February 8, page 340). The bonds were formerly guaranteed by the present Seaboard's predecessor, but the guarantee was not assumed by the reorganized company. The latter took the position that if it should now guarantee the bonds, it would be going further than contemplated by the reorganization plan, and would, in effect, be giving holders of those bonds a priority over the holders of many of the bonds of the old Seaboard who took stock in the new company.

"While the record is clear," the commission said, "that the continued financial stability of the applicant is dependent upon the fostering care of its controlling company, the Seaboard, through the maintenance of existing routes, fair and equitable rates, and active solicitation of traffic over such routes, the Seaboard is unwilling to assume any obligation and liability in respect to the bonds or to bind itself in any manner to continue existing traffic arrangements. As we cannot compel the Seaboard to assume any obligation in respect to the applicant's securities, we are of the opinion that we should leave the bondholders free either to extend their bonds under the proposed plan or to exercise whatever rights they may have under the terms of the mortgage, or otherwise."

MAINE CENTRAL.—*Annual Report.*—Operating revenues of this road in 1946 amounted to $20,615,297, a decrease of $152,216 under the figure reported for the preceding year. Operating expenses were $16,878,490, a decrease of $567,121. Net income was $497,409, an increase of $68,699. Current assets at the end of the year were $5,657,523, compared with $7,124,810. Current liabilities were $3,708,464, compared with $5,210,941. Long term debt was $25,203,504, compared with $25,227,809.

NEW YORK CENTRAL.—*Annual Report.*—Operating revenues of this road in 1946 totaled $616,784,755, compared with $654,363,799 in the preceding year. Operating expenses totaled $558,351,493, compared with $580,680,970. Fixed charges were $40,958,739, compared with $44,075,835. The net deficit was $10,449,268, compared with net income of $24,412,525. Current assets at the end of the year were $216,041,460, compared with $273,215,389. Current liabilities were $114,028,710, compared with $123,430,747. Long term debt was $602,118,090, compared with $603,936,208.

The volume of freight and passenger traffic in 1946 was greater than in any other peacetime year, Gustav Metzman, president, said in the report. The deficit, which was reduced by taking a carry-back tax credit of $21,142,300, was caused largely by inadequate rates only slightly higher than those prevailing in 1939 whereas, since then, the cost of wages, materials and supplies increased about 50 per cent. Labor disturbances in most major industries, including the railroads, also were mentioned by Mr. Metzman as factors in the disappointing results for 1946.

NEW YORK CENTRAL.—*Trackage Rights.* Division 4 of the Interstate Commerce Commission has authorized this road to operate over a 2.5-mile extension of the Saline Valley branch to be constructed by the Cleveland, Cincinnati, Chicago & St. Louis.

NEW YORK, NEW HAVEN & HARTFORD.—*Annual Report.*—Operating revenues of this road last year amounted to $149,259,513, a decrease of $23,937,471 under the figure reported for the preceding year. Operating expenses totaled $128,227,818, a decrease of $13,997,026. Fixed charges were $11,875,930, a decrease of $41,453. The net deficit was $6,365,788, compared with a net income of $3,596,689. Current assets at the end of the year were $72,232,667, a decrease of $19,336,537. Current liabilities were $23,270,246, a decrease of $6,526,012. Long term debt was $252,970,598, a decrease of $7,848,245.

NEW YORK, ONTARIO & WESTERN.—*Annual Report.*—Operating revenues of this road last year amounted to $7,321,323, compared with $7,763,042 in 1945. Operating expenses totaled $7,547,593, compared with $7,743,718. Fixed charges were $1,372,082, compared with $1,234,597. The net deficit was $3,018,515, compared with a net deficit of $2,630,326. Current assets at the end of the year were $1,293,463, compared with $1,450,311. Current liabilities were $4,460,109, compared with $3,694,235. Long term debt was $36,155,350, compared with $34,643,995.

NORTHERN PACIFIC.—*Annual Report.*—Operating revenues of this road in 1946 were $126,744,079, compared with $149,244,108 in the preceding year. Operating expenses were $105,794,660, compared with $132,606,256. Fixed charges were $10,558,802, compared with $13,786,402. Net income was $8,881,146, compared with $11,559,860. Current assets at the end of the year amounted to $79,134,093, compared with $97,775,837. Current liabilities totaled $30,779,024, compared with $51,624,959. Long term debt was $275,457,108, compared with $273,684,400.

RUTLAND.—*Annual Report.*—Operating revenues of this road in 1946 amounted to $5,119,450, compared with $5,049,072 in the preceding year. Operating expenses were $4,913,146, compared with $4,886,328. Fixed charges totaled $401,150, compared with $401,153. The net deficit was $605,709, compared with a net deficit of $639,072. Current assets at the end of the

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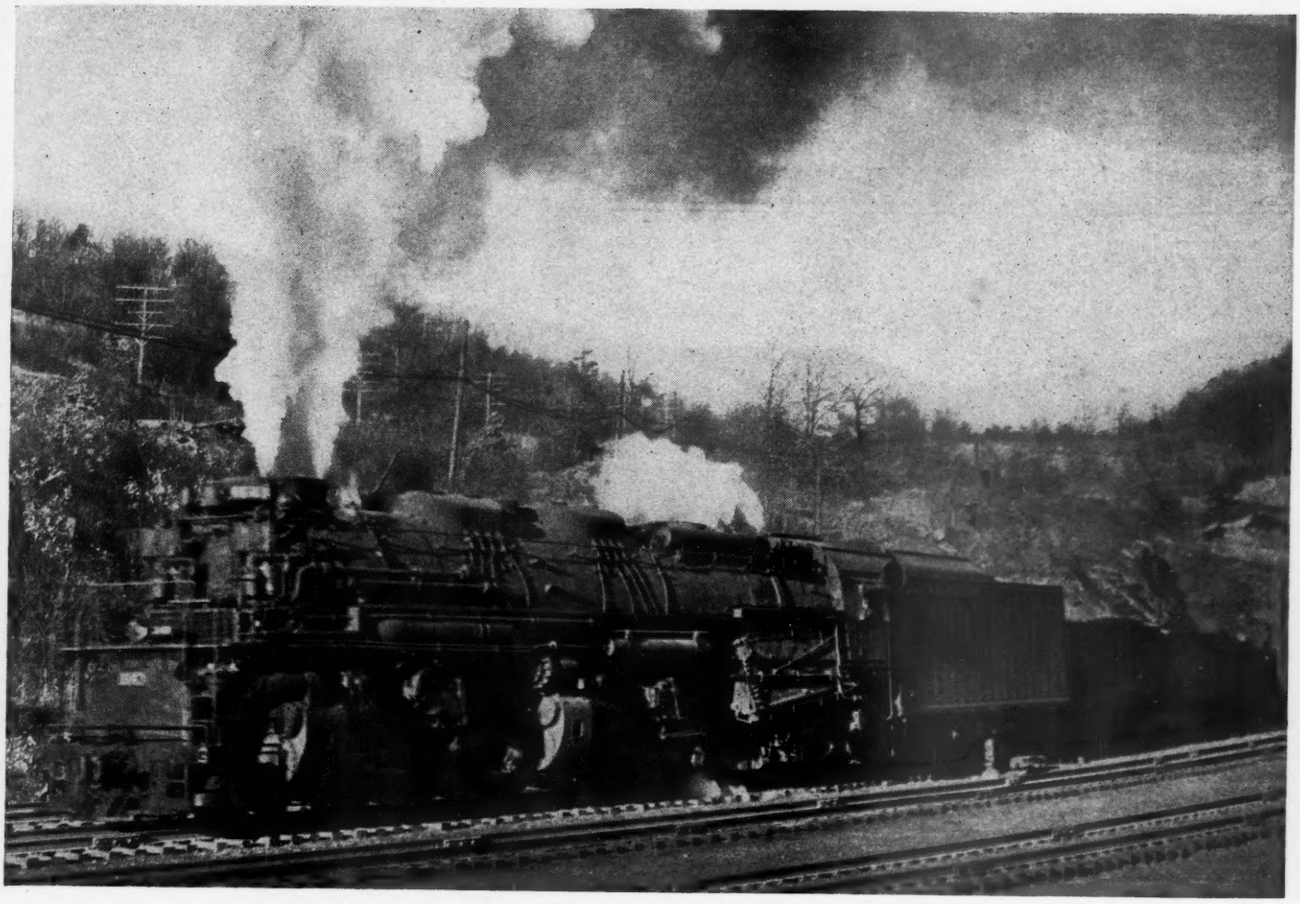

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The tonnage that must be moved on the C & O demands motive power capable of maintaining faster schedules with tremendous loads.

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year were $1,840,944, compared with $1,837,352. Current liabilities were $664,966, compared with $648,138. Long term debt was unchanged at $9,216,000.

SAVANNAH & ATLANTA.—*Annual Report.*—Operating revenues of this road last year amounted to $1,866,311, compared with $1,897,478 in 1945. Operating expenses totaled $1,626,252, compared with $1,415,105. Fixed charges were $55,602, compared with $51,511. Net income was $3,199, compared with $115,758. Current assets at the end of the year were $1,419,204, compared with $1,277,668. Current liabilities were $553,808, compared with $504,529. Long term debt was $950,000, compared with $744,000.

SOUTHERN PACIFIC.—*Reincorporation.*—In a move to prepare the way for carrying out its plan to escape from "excessive" Kentucky taxation by reincorporating in Delaware, this road has asked the Interstate Commerce Commission to approve the holding by its officers and directors of the same positions in the Delaware corporation as they now hold in the Kentucky corporation. The proposed plan of reincorporation, as approved by the directors, will be voted upon by the stockholders at a special meeting called for May 14. If the stockholders' vote is favorable, the present application indicates that another will be filed to seek authority for consummation of the plan.

PEORIA & EASTERN.—*Annual Report.*—Operating revenues of this road last year totaled $4,156,129, compared with $4,256,898 in 1945. Operating expenses were $4,182,714, compared with $3,915,346. The net deficit was $222,480, compared with net income of $3,439.

TORONTO, HAMILTON & BUFFALO.—*Annual Report.*—Operating revenues of this road in 1946 amounted to $3,860,516, compared with $3,819,334 in the preceding year. Operating expenses were $2,618,333, compared with $2,324,358. Net income was $604,550, compared with $662,582. Current assets at the end of the year were $3,935,832, compared with $4,584,072. Current liabilities were $3,099,565, compared with $1,221,190. Long term debt was $1,869,000, compared with $4,872,000.

Dividends Declared

Illinois Terminal.—18¢, payable May 1 to holders of record April 10.

Minneapolis & St. Louis.—25¢, payable May 1 to holders of record April 15.

Norfolk & Western.—Adjustment preferred, $1.00, quarterly, payable May 9 to holders of record April 16.

Pere Marquette.—5% prior preferred (accum.), $1.25, payable May 1 to holders of record April 21.

Reading.—common, 25¢, quarterly, payable May 8 to holders of record April 21.

Vermont & Massachusetts.—$3.00, semi-annually, payable April 7 to holders of record March 31.

Average Prices Stocks and Bonds

	Apr. 1	Last week	Last year
Average price of 20 representative railway stocks..	48.72	48.36	63.27
Average price of 20 representative railway bonds..	91.25	91.12	102.95

Abandonments

SOUTHERN PACIFIC. — This road has applied to the Interstate Commerce Commission for authority to abandon a 2.5-mile line between Wigrich, Ore., and Wigrich Junction.

MISSOURI PACIFIC.—The San Antonio, Uvalde & Gulf, a subsidiary of this road, has applied to the Interstate Commerce Commission for authority to abandon a 4.8-mile line, extending from a point near Brundage, Tex., to Bermuda.

MISSOURI PACIFIC.—The New Iberia & Northern, a subsidiary of this road, has applied to the Interstate Commerce Commission for authority to abandon a line extending from Loreauville, La., to Caroline, approximately 4 miles.

SOUTHERN PACIFIC.—Division 4 of the Interstate Commerce Commission has authorized this road and its lessor, the Arizona Eastern, to abandon, including operation by the former, a 1.2-mile line extending from Inspiration Junction, Ariz., to Live Oak. Operations over the line were suspended in December, 1946, as the result of storm damages.

PITTSBURG COUNTY.—Division 4 of the Interstate Commerce Commission has authorized this road to abandon its entire line from McAlester, Okla., to Hartshorn, 18.4 miles. The net salvage value is estimated by the applicant at $55,422.

"The equipment, facilities and tracks are in need of maintenance and replacements and the applicant is without the resources necessary to make the repairs and to continue operation with due regard to safety," the commission noted. "Efforts by the applicant to sell its line have been to no avail. The tributary territory is not dependent upon the line for transportation service because such service can be provided by the remaining rail and motor carriers serving the area."

Construction

CHESAPEAKE & OHIO.—This road has applied to the Interstate Commerce Commission for authority to construct a 5.3-mile extension to its so-called Trace Fork subdivision in Logan and Mingo counties, W. Va. The proposed construction, to be financed from cash in the applicant's treasury, would serve new bituminous coal mining developments.

CHAMBERS-LIBERTY COUNTIES NAVIGATION DISTRICT.—Acting upon the request of the applicant, Division 4 of the Interstate Commerce Commission has dismissed, without prejudice the Finance Docket No. 15134 proceeding, in which the applicant sought commission authority to construct a 12-mile line from Liberty, Tex., to Moss Bluff.

CHESAPEAKE & OHIO.—This road has announced plans for the construction of a new low level coal pier at Newport News, Va., at an estimated cost of $5,000,000, including the necessary supporting yard facilities. The announcement said the new pier will increase by 33⅓ per cent the road's facilities for loading coal on ships at the Newport News terminus. The C. & O. now has at that point two piers—Nos. 9 and 15—with a total of three dumpers and a combined capacity of 150,000 tons a month under favorable conditions.

The new pier will be similar to and located along the west side of pier 15, a reinforced concrete structure on concrete piling extending 1,000 feet from the bulkhead into the James river. A deep slip will be dredged alongside the new pier and the dredged material will be pumpe onto the shore to provide fill for the new yard. It was estimated it will take 9 months to assemble steel for the new pier and that it will be completed 15 months after construction starts.

ELGIN, JOLIET & EASTERN.—This road has awarded a contract for the construction of a pumphouse at Kirk Yard, Gary, Ind., including a connection to the Gary interceptor sewer, to the Powers-Thompson Construction Company of Joliet, Ill. The project will cost $40,113.

NEW YORK CENTRAL.—Division 4 of the Interstate Commerce Commission has authorized the Cleveland, Cincinnati, Chicago & St. Louis to construct a 2.5-mile extension to its so-called Saline Valley branch in Saline and Williamson counties, Ill. The cost of the construction, estimated at $157,000, will be paid from treasury funds.

Railway Officers

EXECUTIVE

James M. Symes, deputy vice-president in charge of operation of the Pennsylvania, with headquarters at Philadelphia, Pa., has been appointed vice-president in charge of operation, with the same headquarters, succeeding **John Francis Deasy,** who has been appointed vice-president—assistant to president.

Edward B. Stanton, assistant general manager of the Spokane, Portland & Seattle, at Portland, Ore., has been appointed vice-president and general manager, succeeding **Thomas F. Dixon,** whose appointment as vice-president in charge of operations of the Great Northern, was reported in the *Railway Age* of March 29.

W. W. Judson, general manager of the Northern Pacific, at St. Paul, Minn., has been promoted to vice-president of maintenance and operation with the same headquarters, succeeding **H. E. Stevens,** who retired on April 1.

James W. McLaughlin has been appointed assistant vice-president in charge of car department, Southern Pacific of

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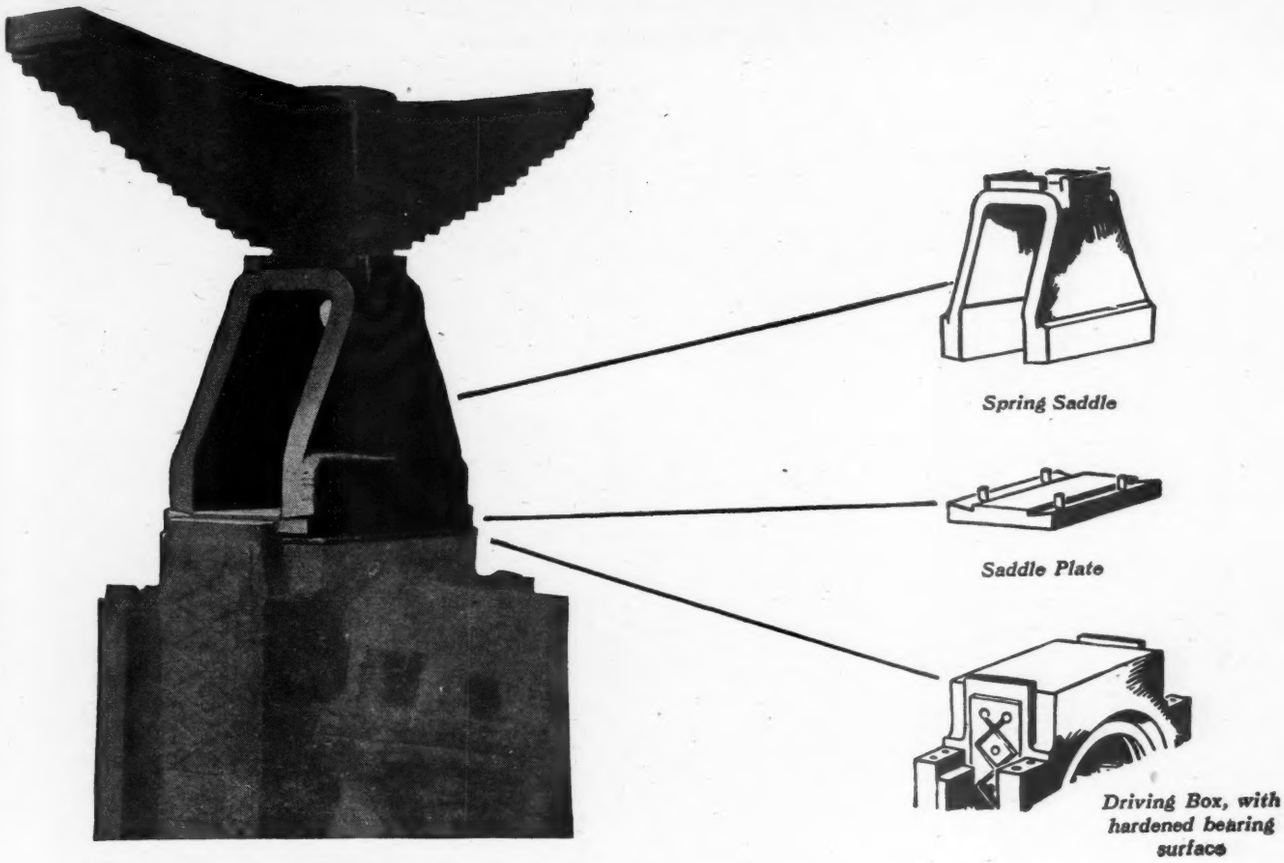


announcing

THE FRANKLIN *Frame-Guided* SPRING SADDLE

PREVENTS FAILURE OF LOCOMOTIVE SPRING RIGGING. Reduces maintenance costs by keeping spring saddle, spring, and spring hangers in line with frame, eliminating twisting and bending.

GIVES SMOOTH ACTION ON CURVES. Absorbs excessive inertia forces from driving-box lateral without restricting lateral displacement.

With this design, driving boxes are free to move laterally with the axle and driving wheels without any corresponding lateral movement of the spring saddles. Saddles are supported on saddle plates which allow the driving box to slide laterally while saddle, spring and rigging maintain strict alignment with frame of locomotive at all times. Twisting, bending or tilting of saddles, fanning of springs, and bending of hangers are eliminated.

Records on a group of locomotives equipped with this saddle show not one breakage during the same period in which three hangers per locomotive and one saddle per three locomotives were broken on a similar group equipped with conventional saddles.

Applicable to roller-bearing or plain-bearing driving boxes, new or existing locomotives.

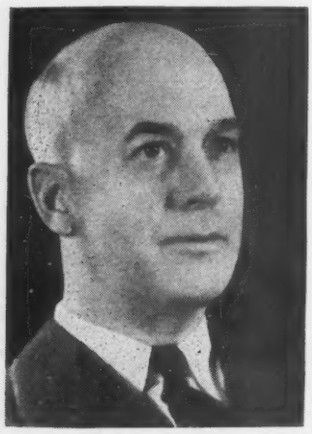
FRANKLIN RAILWAY SUPPLY COMPANY, INC.

NEW YORK • CHICAGO • MONTREAL

STEAM DISTRIBUTION SYSTEM • BOOSTER • RADIAL BUFFER • COMPENSATOR AND SNUBBER • POWER REVERSE GEARS
AUTOMATIC FIRE DOORS • DRIVING BOX LUBRICATORS • STEAM GRATE SHAKERS • FLEXIBLE JOINTS • CAR CONNECTION

Mexico, with headquarters at Guadalajara, Jalisco.

Thomas F. Dixon, whose appointment as vice-president in charge of operations of the Great Northern, with headquarters at St. Paul, Minn., was reported in the *Railway Age* of March 29, entered service of the G. N. in 1900 at Superior, Wis. He later served in various positions in the road's operating department at Seattle, Wash., and Spokane, and in 1927 was appointed assistant superintendent at White-



Thomas F. Dixon

fish, Mont. The following year Mr. Dixon advanced to superintendent at Klamath Falls, Ore., which position he also held later at Havre, Mont., and Great Falls. In 1942 he became general manager, Lines West, with headquarters at Seattle, and the next year was appointed vice-president and general manager of the Spokane, Portland & Seattle (owned jointly by the Great Northern and the Northern Pacific), at Portland, Ore. Mr. Dixon was serving in the latter position at the time of his advancement to operating vice-president of the G. N.

Charles O. Jenks, whose retirement as vice-president in charge of operations of the Great Northern, at St. Paul, Minn.,

Charles O. Jenks

was reported in the *Railway Age* of March 29, was born on March 6, 1874, at St. Paul, and received his higher education at the University of North Dakota. Mr. Jenks entered railway service in 1892 with the G. N. as a clerk in the superintendent's office. He later advanced successively through positions as chief clerk, trainmaster, assistant superintendent, and superintendent, and in 1906 he entered private business. In 1909 he returned to the G. N. as superintendent, later advancing to general superintendent. In 1915 he became general manager of the Spokane, Portland & Seattle (owned jointly by the Northern Pacific and the G. N.), at Portland, Ore., and from 1916 to 1920 he served successively as assistant general manager and assistant federal manager of the G. N. He had been vice-president in charge of operations since March, 1920.

Hugh B. Main, whose promotion to assistant to president of the Canadian Pacific Air Lines (subsidiary of the Canadian Pacific), was reported in the *Railway Age* of March 29, was born in 1915, at Smith's Falls, Ont., and received his higher education at the University of Saskatchewan and the University of Toronto. He was first employed by the C. P. during summer vacations from 1935 to 1937, serving later at Moose Jaw, Sask., and Winnipeg, Man. He joined the C. P. Air Lines in 1942, holding positions with that company at

Hugh B. Main

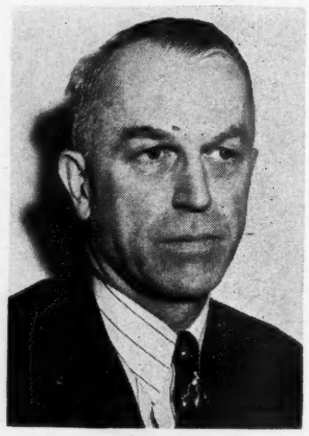
Winnipeg and Edmonton, Alta., prior to enlistment in the Royal Canadian Navy. Following his discharge, he served successively as special representative for C. P. Air Lines at Edmonton and Montreal, Que.; assistant superintendent of the Saskatchewan district at Regina, Sask.; and director of research at Montreal. Mr. Main held the latter position at the time of his new appointment.

FINANCIAL, LEGAL AND ACCOUNTING

Carl Niderost, assistant manager of the personnel department of the Canadian Pacific, with headquarters at Montreal, Que., has been appointed assistant secretary of the company.

John B. Sawyer and **Richard Jackson,** attorneys of the Boston & Maine, have been appointed general attorneys, with headquarters at Boston, Mass.

Morris W. Mashburn, whose promotion to auditor of disbursements of the Nashville, Chattanooga & St. Louis, with headquarters at Nashville, Tenn., was reported in the *Railway Age* of March 8, was born on June 8, 1897, at Tunica, Miss., and received his higher education at Vanderbilt University. He entered railway service with the N. C. & St. L. in 1916 as a clerk in the passenger receipts division, and held various positions until 1922, when he was appointed chief clerk in the disbursements division of the accounting department at Nashville. In 1926 he was appointed division auditor at Tullahoma, Tenn., remain-



Morris W. Mashburn

ing in that position until 1930, when the division offices were consolidated under a centralized accounting system at Nashville. At that time he was appointed chief clerk there, which position he held until his appointment in 1943 as assistant to controller. Mr. Mashburn was serving in the latter capacity at the time of his new appointment.

OPERATING

R. B. Croll has been appointed superintendent of transportation of the Pere Marquette, with headquarters at Detroit, Mich.

Albert J. Hunt, executive chief clerk to vice-president and general manager of the Spokane, Portland & Seattle, has been appointed assistant to general manager, with headquarters as before at Portland, Ore.

G. A. Alford has been appointed trainmaster of terminals, Texas & Pacific, with headquarters at Texarkana, Tex., succeeding **L. White.**

O. L. Young has resumed his duties as superintendent of terminals of the St. Louis-San Francisco, with headquarters at Memphis, Tenn., succeeding **W. E. Eagan,** who has resumed his position as general yardmaster at Tulsa, Okla.

L. T. Andrews has been appointed general superintendent transportation of the Atlantic Coast Line at Wilmington, N. C. **L. W. Green** has been appointed assistant general superintendent transportation at Wilmington. **H. W. Pinner** has been appointed transportation assistant at Wilmington. **F. B. Robins** has been appointed assistant to general manager at Wilmington. **C. L. Burpee** has been appointed train-

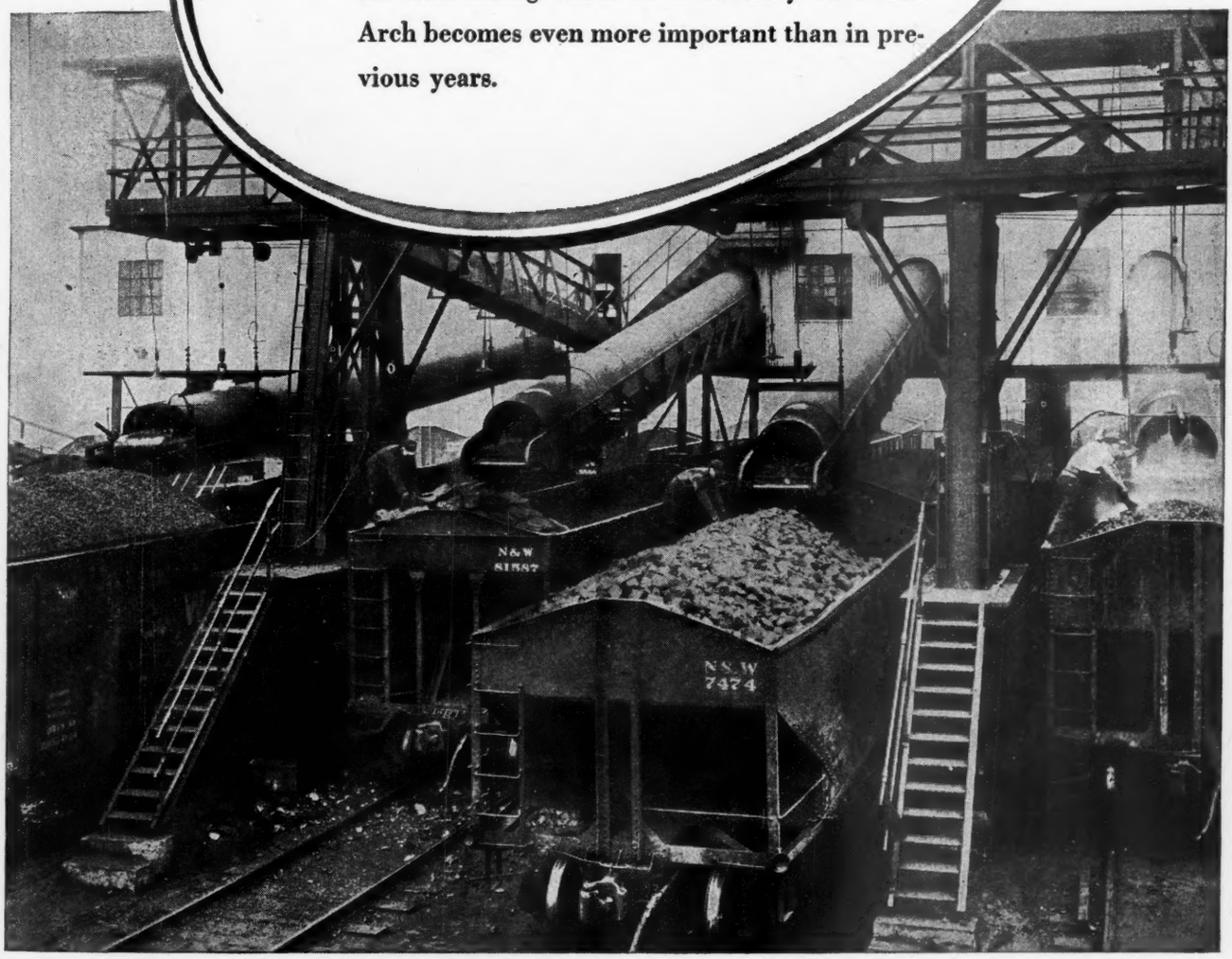
News Department continued on next left-hand page

LOCOMOTIVES THAT "EAT" TOO MUCH!

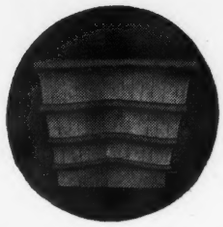
A locomotive may have an abnormal appetite for fuel because it is not getting maximum power from the coal it burns.

One measure for assuring fuel efficiency is to make certain that a complete brick arch in the firebox is maintained at all times.

And with the steadily increasing cost of coal, the fuel-saving value of a Security Sectional Arch becomes even more important than in previous years.



HARBISON-WALKER REFRACTORIES CO.
Refractories Specialists



AMERICAN ARCH CO. INC.
60 East 42nd Street, New York 17, N. Y.
Locomotive Combustion Specialists

master of the Montgomery district, with headquarters at Dothan, Ala.

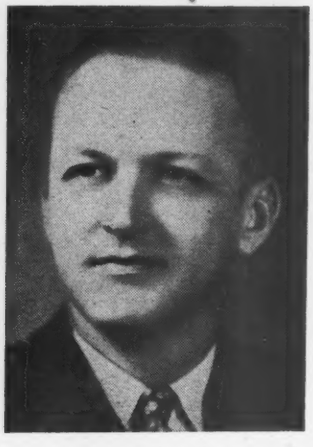
Lester Wittnebert has been appointed superintendent of the Jay Street Connecting, with headquarters at Brooklyn, N. Y., succeeding **Walter E. Branagan,** resigned.

J. A. Walford, superintendent of the Canadian Pacific Express Company (subsidiary of the Canadian Pacific), at Vancouver, B. C., has been promoted to general superintendent of that company's Western Lines, with headquarters at Winnipeg, Man., succeeding **Harry Y. Knox,** who has retired following 46 years of service. Mr. Walford is succeeded by **W. T. Beaven,** assistant superintendent at Vancouver.

P. J. Warner has been appointed superintendent of the Union (part of the Missouri Pacific System), with headquarters at Memphis, Tenn., succeeding **N. N. Hopkins,** who has been appointed assistant division superintendent of the M. P. at Pueblo, Colo. Mr. Hopkins succeeds **L. L. Lowe,** who has been transferred to Wynne, Ark. **R. W. Parker,** trainmaster at Wichita, Kan., has been appointed assistant superintendent, with headquarters at Kansas City, Mo. He is succeeded by **J. S. Simon,** assistant trainmaster at Kansas City.

Herbert E. Bixler, general superintendent of transportation of the New York, New Haven & Hartford, with headquarters at New Haven, Conn., has been appointed to the newly-created position of general merchandise manager. The object of the new position is to coordinate sales and solicitation of less-than-carload traffic with the actual handling, with a view of providing the shipper with better service at a lower cost to the railroad. A photograph of Mr. Bixler and a biographical sketch of his railway career were published in the *Railway Age* of October 5, 1946, page 584

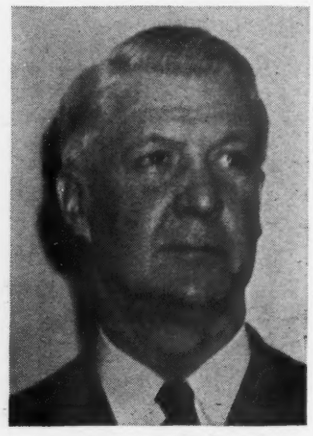
Albert St. Clair, whose appointment as superintendent of the Appalachian divi-



Albert St. Clair

sion of the Southern at Bristol, Va.-Tenn. was reported in the *Railway Age* of March 22, was born at Macon, Ga., on June 17, 1912. He received his higher education at the University of Tennessee, and entered the service of the Southern as a student apprentice in October, 1937, being promoted to assistant supervisor in November, 1938. One year later he was appointed trainmaster at Atlanta, Ga., and in March, 1946, he was promoted to assistant superintendent of the Knoxville division at Knoxville, Tenn., where he remained until his recent promotion to superintendent.

Fred B. Whitman, whose promotion to general superintendent of the Chicago, Burlington & Quincy, with headquarters at Lincoln, Neb., was reported in the *Railway Age* of March 8, was born on September 1, 1898, at Cambridge, Mass., and received his higher education at Harvard University. He began his railroad career in 1919 as a locomotive fireman and machinist helper on the Fort Worth & Denver City (part of the C. B. & Q.), and entered the employ of the Burlington in 1921. He held various positions in different departments of the road until 1925, when he was appointed as-



Fred B. Whitman

sistant trainmaster. Mr. Whitman became trainmaster at Galesburg, Ill., in 1929, which position he also held later at Aurora, Ill., and Hannibal, Mo. He was promoted to assistant superintendent at Creston, Iowa, in 1935, and to assistant to general manager at Omaha, Neb., in 1937. He was further advanced to division superintendent at St. Joseph, Mo., in 1939, and was transferred to McCook, Neb., in 1943. At the time of his promotion, Mr. Whitman was assistant general superintendent at Lincoln, a position he had held since April 15, 1945.

C. C. Kilway, assistant to vice-president in charge of operations of the Texas & Pacific, with headquarters at Dallas, Tex., has retired after 40 years of service with the road.

C. V. Berglund, general superintendent of transportation of the Northern Pacific, with headquarters at St. Paul, Minn., has been appointed general manager, Lines East, with the same headquarters, succeeding **W. W. Judson,** whose promotion to vice-president in charge of maintenance and operation, is reported elsewhere in these columns. Succeeding Mr. Berglund is **Robert E. Mattson,** assistant general superintendent of transportation, who in turn is succeeded by **E. L. Martin,** general car service agent.

S. S. Rose, trainmaster of the Atchison, Topeka & Santa Fe at Marceline, Mo., has been appointed assistant to general manager, with headquarters at Topeka, Kan., succeeding **R. H. Downes,** who has retired after 47 years of service with the road. Mr. Rose is succeeded by **J. E. Lynch,** passenger trainmaster at Kansas City, Mo., who in turn is succeeded by **W. A. Gossett,** general transportation inspector at Topeka, Kan. Mr. Gossett is succeeded by **E. J. Bruce,** who was transferred from the road's western district. **G. A. Ossian,** transportation inspector at Chanute, Kan., has been appointed general transportation inspector, Western district, at Topeka.

George F. VanLuvanee, whose appointment as superintendent of the Philadelphia division of the Reading at Philadelphia, Pa., was reported in the *Railway Age* of March 8, was born on December 29, 1902, at Doylestown, Pa., where he attended high school. Mr. VanLuvanee entered railroad service on March 7, 1919, with the Reading as assistant agent, becoming ticket clerk the following May. He served as extra operator and towerman, train dispatcher and operator on the New York division from April, 1922, to April, 1934, then becoming rules examiner on the Philadelphia and New York division and operator on the New York dvision succes-

George F. VanLuvanee

sively. After serving as agent-telegrapher at West Point, N. Y., and relief operator, towerman and rules examiner on the New York division, Mr. VanLuvanee became yardmaster at Trenton, N. J., on April 10, 1937. He was appointed assistant trainmaster at East Penn Junction on April 1, 1938, being transferred to Reading, Pa., on November 21, 1938. Going to the Philadelphia division on January 1, 1941, as freight trainmaster, he was promoted to assistant superintendent of that division on November 25, 1945, holding the latter position at the time of his recent promotion to superintendent.

Bernard Allen, whose promotion to general superintendent of the Canadian National, with headquarters at Vancouver, B. C., was reported in the *Railway Age* of March 29, was born in Nova Scotia and was graduated from the University of New Brunswick with an engineering degree. He entered service with the C. N. in 1913,

News Department continued on next left-hand page

Water carryover with the steam is the biggest offender in the loss of superheat.

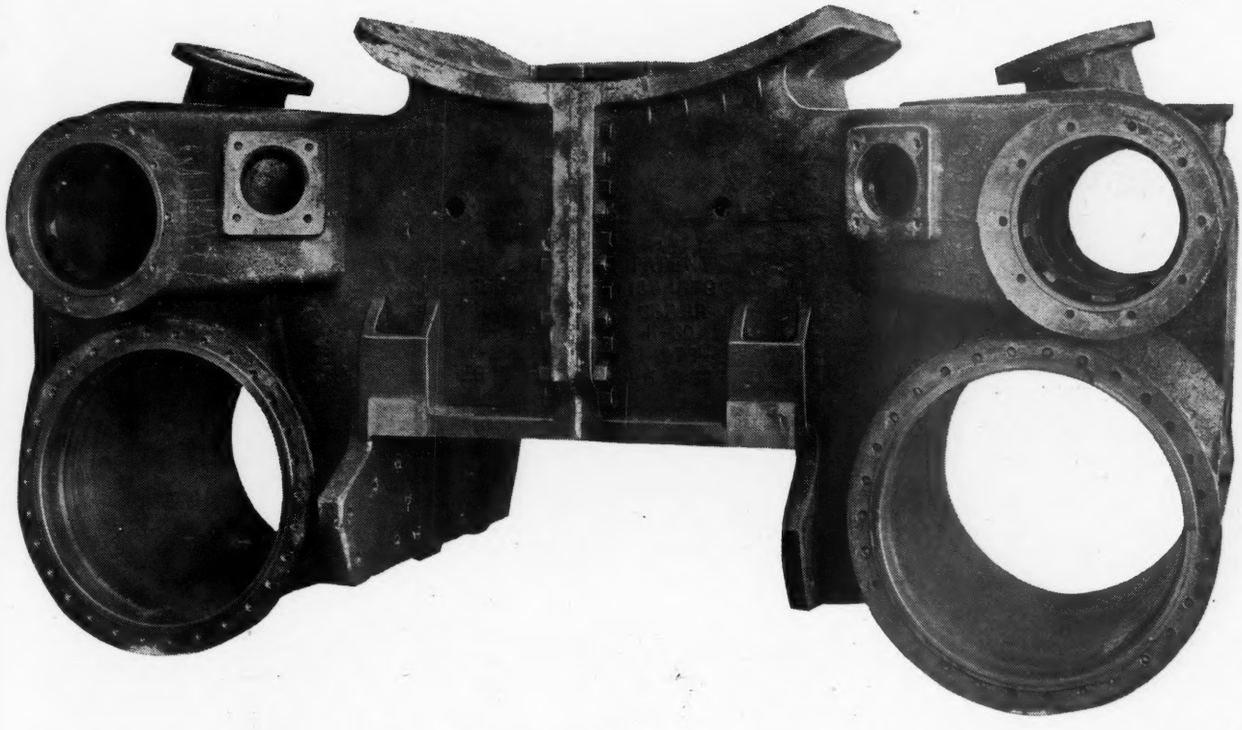
Such losses can be prevented with an Elesco Steam Dryer System.

It pays to equip every locomotive . . . INVESTIGATE.

Cylinder Efficiency *drops* 1½% — 2% with each 15 deg. loss of superheat.

THE SUPERHEATER COMPANY

Representative of AMERICAN THROTTLE COMPANY, INC.
60 East 42nd Street, NEW YORK
122 S. Michigan Ave., CHICAGO
Montreal, Canada, THE SUPERHEATER COMPANY, LTD.



A-1848 (A-1361)

Superheaters • Superheater Pyrometers • Exhaust Steam Injectors • Steam Dryers • Feedwater Heaters • American Throttles

with the majority of his earlier work consisting of car ferry and terminals operation. He was also associated for a time with the St. John Dry Dock & Shipbuilding Co., engaged in drydock construction and shipbuilding. Mr. Allen later served on the C. N.'s engineering staff, after which he

Bernard Allen

was transferred to the road's bureau of economies. During the war he was in charge of Prince Rupert dry dock and shipyard of the C. N., where he directed construction of warships and cargo vessels.

J. C. Grisinger, whose promotion to general manager, Lines East, of the Chicago, Burlington & Quincy was reported in the *Railway Age* of March 8, was born

J. C. Grisinger

on June 30, 1880, at Lenox, Iowa, and entered railway service in 1896 as a station helper with the Burlington & Missouri River (now part of the C. B. & Q.). He later served as telegraph operator on that road, and as train dispatcher, assistant chief dispatcher and chief dispatcher with the Burlington. In 1911 he was promoted to trainmaster, and in 1917 he became inspector of transportation. From 1918 to 1931 Mr. Grisinger served successively as division superintendent at Sterling, Colo., and Casper, Wyo., and in the latter year was advanced to general superintendent of the road's central district at Burlington, Iowa. He held this position at the time of his new appointment.

TRAFFIC

Russell W. Ohlman has been appointed general passenger agent of the Pere Marquette, with headquarters at Detroit, Mich.

The Minneapolis, St. Paul & Sault Ste. Marie has established freight traffic offices in Seattle, Wash., and Portland, Ore., with **M. J. O'Malley** and **J. J. Pearce** as general agents respectively at those two points.

D. W. Lang has been appointed division freight agent of the Baltimore & Ohio, with headquarters at Toledo, Ohio.

P. E. Davidson has been appointed general agent of the Norfolk & Western, with headquarters at Detroit, Mich., succeeding **W. M. Cramer,** who died recently.

P. F. Horton has been appointed assistant to freight traffic manager—service, Chesapeake & Ohio and Pere Marquette, with headquarters at Cincinnati, Ohio.

F. F. Foery has been appointed general agent of the Atchison, Topeka & Santa Fe at Cincinnati, Ohio. **R. E. Fagerberg has been appointed district passenger agent at St. Louis, Mo.**

E. H. Wigand, division freight agent of the Louisville & Nashville, at Atlanta, Ga., has been transferred to Knoxville, Tenn., succeeding **A. E. Mann,** who has retired. **W. C. Wathen**, commercial agent at Atlanta, has been advanced to division freight agent there, succeeding Mr. Wigand.

Harvey R. Wright has been appointed assistant general freight agent of the Atchison, Topeka & Santa Fe, with headquarters at San Francisco, Cal., succeeding **Theodore M. Caiazza,** whose promotion to freight traffic manager at Chicago was reported in the *Railway Age* of March 15.

H. J. Heymann, general agent of the Chicago & North Western at Rapid City, S. D., has been promoted to division freight an passenger agent there. **J. E. Kircher** and **R. E. Williams** have been appointed general agents respectively at Green Bay, Wis., and Rockford, Ill.

J. Edgar Nash has been appointed traffic manager—rates-division, of the Alabama, Tennessee & Northern, with headquarters at Mobile, Ala., succeeding **W. E. Karcher,, Jr.**, whose appointment as assistant general freight agent of the Gulf, Mobile & Ohio, at Mobile, was reported in the *Railway Age* of March 15.

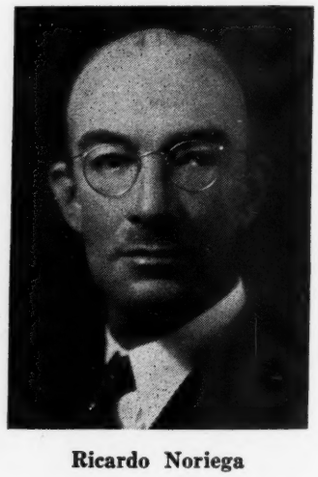
O. L. Davidson and **E. A. Woolen** have been appointed general agents of the Chesapeake & Ohio and the Pere Marquette, with headquarters at Columbia, S. C., and Greeneville, respectively.

Walter W. Robinson, city passenger agent of the Central of New Jersey at Scranton, Pa., has been appointed district passenger agent, with headquarters at New York, succeeding the late **Gregory J. Speicher.**

F. Arthur Young, general passenger agent of the Pere Marquette, with headquarters at Detroit, Mich., has retired after 49 years of railroad service. Born on July 5, 1880, at Millington, Mich., Mr. Young entered railway service in 1898 as an agent with the Detroit, Grand Rapids & Western (now P. M.), at Merrill, Mich. He subsequently held positions as ticket clerk, ticket agent and division passenger agent, and in 1919 he became general agent, passenger department, at Detroit. He held the latter position until 1936, when he was advanced to assistant general passenger agent. The following year he was promoted to general passenger agent, the position he held at the time of his retirement.

Charles C. Bostwick, district freight and passenger agent of the Southern system at Montgomery, Ala., has been promoted to division freight and passenger agent at Rome, Ga., succeeding **H. J. Herron,** who has retired after 37 years of railway service. **W. Dean Gallaway,** district freight agent at Macon, Ga., has been appointed district freight and passenger agent at Montgomery, to succeed Mr. Bostwick. **John H. Winstead,** commercial agent at Knoxville, Tenn., has been promoted to district freight agent, with the same headquarters, succeeding **A. W. Mays,** commercial agent, who has retired after 44 years of service.

Ricardo Noriega, whose appointment as Mexican traffic manager of the Missouri-Kansas-Texas, with headquarters at Mexico City, Mex., was reported in the *Railway Age* of March 15, was born on March 31, 1892, at Mexico City, and entered railway service in 1913 in the accounting department of the National of Mexico. He was associated with that road until 1918, at which time he left railway service. In 1925 he



Ricardo Noriega

joined the Katy as a clerk at Mexico City, and the following year he was promoted to passenger representative there. He advanced to freight and traffic representative in charge of the road's Mexico City office in 1927, and in 1929 was appointed Mexican traffic representative. Mr. Noriega was serving in the latter capacity at the time of his new appointment.

J. A. Lynch, general freight agent of the Texas & Pacific, with headquarters at Dallas, Tex., has retired after 54 years of railroad service. Mr. Lynch was born on February 13, 1881, at St. Martinsville, La., and entered railway service with the T. & P. as a telegraph messenger at Dallas, Tex., in

News Department is continued on the second right-hand page.

1893. He later held positions successively as revising clerk, ticket agent, clerk in auditor's office and chief clerk in the general freight office. In 1917 he became assistant to the general freight agent, and in 1921 he was promoted to general freight agent, which position he held at the time of his retirement.

T. R. Ruth, division passenger agent of the New York Central at Albany, N. Y., has been appointed assistant general passenger agent at New York, succeeding **George F. Stanton**, whose death on March 6 was reported in the *Railway Age* of March 15. **C. H. LaFond,** general agent at Portland, Ore., has been appointed division passenger agent at Albany. **W. H. White,** chief clerk in the general passenger agent's office at St. Louis, Mo., has been appointed general agent at Portland.

Theodore M. Caiazza, whose promotion to freight traffic manager of the Atchison, Topeka & Santa Fe, at Chicago, was reported in the *Railway Age* of March 15, was born on March 6, 1905, at Fresno, Cal. He attended the University of California for a short period prior to accepting his first position with the Santa Fe in 1926 as a stenographer in the operating department at San Francisco. He was later transferred to the traffic department, advancing through positions there as division clerk and rate clerk, and as chief clerk in the foreign department and head rate clerk in the freight traffic department. He served as chief rate clerk from 1939 to 1942, and as head rate clerk from 1942 to 1944. In the latter year he was appointed assistant general freight agent, the position he held at the time of his recent promotion.

John H. Kuntz, whose promotion to general freight agent of the Baltimore & Ohio, with headquarters at Chicago, was reported in the *Railway Age* of March 15, was born on August 7, 1895, at Cincinnati, Ohio. He entered railway service there with the Pennsylvania in 1914 as a rate clerk, serving later in this position also with

John H. Kuntz

the Louisville & Nashville and the B. & O. He was advanced to chief rate clerk of the latter road at St. Louis, Mo., in 1932, and the following year was transferred to Chicago. In 1935 he became chief clerk, and in 1936 he was promoted to assistant general freight agent, the position he held at the time of his recent advancement.

Sigurd Carlson, whose promotion to general passenger agent of the Atchison, Topeka & Santa Fe, at Los Angeles, Cal., was reported in the *Railway Age* of February 22, was born on November 18, 1893, in Sweden, and entered railway service in 1911 as an office boy and file clerk with the Chicago, Rock Island & Pacific at Topeka, Kan. The following year he advanced to stenographer there, and in 1915 he became assistant city passenger agent at Wichita, Kan. Mr. Carlson served in the Navy from August, 1917, to February, 1919, after which he became employed as

Sigurd Carlson

cashier and ticket seller in the consolidated ticket office at St. Joseph, Mo. He returned to Wichita in 1919 as ticket seller in the Union Station ticket office there, and in 1920 he joined the Santa Fe as city passenger agent. He later served as traveling passenger agent and division passenger agent successively at Boston, Mass., and as division passenger agent at Denver, Colo. In November, 1941, he was promoted to assistant general passenger agent at Topeka, which position he held at the time of his new appointment.

ENGINEERING & SIGNALING

W. H. Rochester, acting chief engineer of the Gulf, Colorado & Santa Fe (part of the Atchison, Topeka & Santa Fe), has been appointed chief engineer, with headquarters as before at Galveston, Tex., succeeding **W. W. Wilson,** who has retired.

A. L. Simpson has been appointed timber treatment engineer of the New York Central System, with headquarters at Air Line Junction, Ohio, succeeding **C. W. Greene,** who has retired after 46 years of service.

M. L. Bardill, assistant engineer of the Chicago, Milwaukee, St. Paul & Pacific, at Ottumwa, Iowa, has been appointed division engineer of the Terre Haute division, with headquarters at Terre Haute, Ind., succeeding **C. L. Waterbury,** who has been appointed supervisor of fuel and water service, with headquarters at Chicago, where he replaces **Kenneth Weir,** whose resignation to enter private employment was reported in the *Railway Age* of March 29. **F. F. Hornig,** assistant engineer, at Mason City, Iowa, has been appointed division engineer, with the same headquarters, succeeding **I. C. Brewer,** who has been transferred to the Milwaukee division, with headquarters at Milwaukee, Wis.

A. C. Hoyt, engineer of surveys of the Chicago Great Western, at Chicago, has been appointed engineer of bridges and buildings of the Elgin, Joliet & Eastern, with headquarters at Joliet, Ill. Mr. Hoyt will be in charge of all bridge and building work on the system and will have general supervision of drafting forces. The positions of superintendent of bridges and buildings, Joliet division and Gary division, have been abolished. The position of office engineer, drafting room, at Joliet, has been abolished. **F. J. Halbkat,** communications engineer, at Joliet, has been appointed office engineer in the signal engineer's office, with the same headquarters. The position of communications engineer at Joliet has been abolished. A sketch of Mr. Halbkat's career appeared in the *Railway Age* of January 11. **W. E. Elliott** has been appointed signal supervisor at Joliet. The position of assistant signal engineer at Joliet has been abolished.

E. L. E. Zahm, whose appointment as water engineer of the Missouri-Kansas-Texas, with headquarters at Parsons, Kan., was reported in the *Railway Age* of February 8, entered railroad service in 1923 as a laboratory assistant in the water engineer's department of the Missouri-Kansas-Texas, at Parsons. In 1924 he was appointed inspector in the same department, with headquarters at Waco, Tex., and served in that capacity until 1931, when he

E. L. E. Zahm

was appointed chemist at Smithville, Tex. He returned to Parsons in 1934 as inspector, and in 1940 he resigned to enter the service of the National Aluminate Corporation as service engineer at Dallas, Tex. From May, 1943, to January, 1944, he was on leave of absence from National Aluminate to serve as consultant for the United States Railway Mission in Mexico. In 1944 he was appointed Southwestern railway representative of National Aluminate, with headquarters at Dallas, where he served until his recent appointment as water engineer on the M-K-T.

Robert L. Groover, assistant chief engineer of the Atlantic Coast Line, has been

promoted to chief engineer, with headquarters as before at Wilmington, N. C. **Charles Spurgeon Sanderson,** principal assistant engineer, has been appointed assistant chief engineer, with headquarters as before at Wilmington. **C. R. Lapeza** has been appointed office engineer at Wilmington, succeeding **M. W. Clark,** who has been appointed principal assistant engineer, with the same headquarters. **L. E. Bates,** roadmaster at Wilmington, has been appointed engineer maintenance of way of the Southern division, with headquarters at Jacksonville, Fla., succeeding **W. J. Turner,** who has been promoted to assistant chief engineer at Wilmington. **James Smallwood Webb,** signal and telephone engineer, has been appointed chief engineer communication and signaling, with headquarters as before at Wilmington.

MECHANICAL

A. E. Rice, assistant to chief mechanical officer of the Denver & Rio Grande Western, at Denver, Colo., has been appointed assistant chief mechanical officer, with the same headquarters.

V. C. Golden, special assistant to the general manager of the Chicago, Indianapolis & Louisville, at LaFayette, Ind., has been appointed superintendent of Diesel locomotive maintenance and operation, with the same headquarters.

Edgar Mawhinnie has been appointed supervisor of electrical maintenance of the Chicago terminal of the Illinois Central, succeeding **M. J. Clark,** who has retired after 48 years of railroad service.

H. V. Gill, master mechanic of the Atchison, Topeka & Santa Fe, at Winslow, Ariz., has been transferred to Barstow, Cal. The office of the master mechanic of the Arizona division has been moved to Barstow. **T. A. Stewart,** assistant supervisor of Diesel engines, at Chicago, has been transferred to Los Angeles, Cal., where he replaces **Harold F. Mackey,** whose appointment as supervisor of Diesel engines, at Chicago, was reported in the *Railway Age* of March 22.

Karl A. Lentz, master mechanic of the Southern system at Meridian, Miss., has been transferred to Birmingham, Ala., succeeding **Miles G. Stevens,** who has resigned to accept a position with the Union Railroad at Pittsburgh, Pa. **John L. Christian,** master mechanic of the Kentucky & Indiana Terminal at Louisville, Ky., has been transferred to Meridian, to succeed Mr. Lentz.

SPECIAL

Dr. Mario Madrazo has been appointed chief surgeon of the National of Mexico, with headquarters at Mexico City, Mex.

R. S. Van Ness has been appointed supervisor of safety of the Chicago, Burlington & Quincy, with headquarters at Ottumwa, Iowa.

Dr. Roland S. Kieffer has been appointed chief surgeon of the Missouri-Kansas-Texas, with headquarters at St. Louis, Mo., succeeding **Dr. R. S. Yancey,** who died recently.

J. F. Rector, director of publicity and advertising of the Missouri Pacific, with headquarters at St. Louis, Mo., has been appointed director, convention and tour department. **Ray Maxwell,** advertising manager, succeeds to Mr. Rector's former duties.

Dr. Frederick L. Ford has been appointed chief surgeon of the Atchison, Topeka & Santa Fe Hospital Association, with headquarters at Topeka, Kan., succeeding **Dr. M. L. Bishoff,** who has retired after more than 46 years of service.

A. N. Baker, safety supervisor of the Atchison, Topeka & Santa Fe, with headquarters at Fresno, Cal., has been promoted to general safety supervisor, Coast Lines, with headquarters at Los Angeles, Cal. A safety supervisor has been assigned to each division of the Coast Lines, with the following changes in personnel as a result: **W. J. Tillman,** formerly safety supervisor with jurisdiction over the Albuquerque (N. M.) and Arizona divisions, has been assigned to the Albuquerque division, with headquarters at Winslow, Ariz.; **L. R. Villermin,** safety supervisor at Fort Worth, Tex., has been transferred to Needles, Cal., with jurisdiction over the Arizona division; and **Norbert F. Young** has been appointed safety supervisor at Fresno, with jurisdiction over the Valley and San Francisco divisions.

OBITUARY

Walter A. Johnson, who retired in 1945 as publicity and advertising director of the Missouri-Kansas-Texas, died on March 30 at the Missouri Baptist hospital at St. Louis, Mo.

Operating Revenues and Operating Expenses of Class I Steam Railways

Compiled from 130 monthly reports of revenues and expenses representing 134 Class I steam railways
(*Switching and Terminal Companies Not Included*)
FOR THE MONTH OF JANUARY, 1947 AND 1946

Item	United States		Eastern District		Southern District		Western District	
	1947	1946	1947	1946	1947	1946	1947	1946
Miles of road operated at close of month	227,677	227,886	55,803	55,970	43,345	43,368	128,529	128,548
Revenues:								
Freight	$551,049,614	$453,489,745	$214,384,407	$173,535,732	$117,027,569	$93,157,300	$219,637,638	$186,796,713
Passenger	82,450,342	137,605,378	40,751,530	55,541,133	14,453,567	22,797,553	27,245,245	59,266,692
Mail	11,118,796	10,561,041	3,957,334	3,569,875	1,917,523	1,805,693	5,243,939	5,185,473
Express	8,980,587	8,343,687	2,617,348	791,256	1,521,620	1,499,839	4,841,619	6,052,592
All other operating revenues	31,941,899	30,972,470	14,456,146	13,968,289	4,892,100	4,273,346	12,593,653	12,730,835
Railway operating revenues	685,541,238	†640,972,321	276,166,765	247,406,285	139,812,379	123,533,731	269,562,094	270,032,305
Expenses:								
Maintenance of way and structures	86,677,016	86,994,245	31,547,572	32,070,826	19,341,503	18,236,204	35,787,941	36,687,215
Depreciation	10,104,292	9,970,538	4,361,402	4,283,351	1,653,275	1,621,214	4,089,615	4,065,973
Retirements	347,044	807,105	149,308	92,423	71,675	68,617	*126,061	646,065
Deferred maintenance	*207,247	*546,091	*38,923	*19,190	*22,820	*235,778	*145,504	*291,123
Amortization of defense projects	106,465	*73,545	13,311	10,020	27,090	*52,207	66,064	*31,358
Equalization	4,572,649	5,077,933	2,546,113	2,431,533	732,230	1,385,228	1,294,306	1,261,172
All other	71,753,813	71,758,305	24,516,361	25,272,689	16,880,053	15,449,130	30,357,399	31,036,486
Maintenance of equipment	126,204,669	118,258,087	55,421,571	51,188,061	24,770,791	21,251,023	46,012,307	45,819,003
Depreciation	18,742,727	18,314,641	7,791,276	7,632,918	3,815,806	3,735,116	7,135,645	6,946,607
Retirements	*19,238	*24,083	*1,735	*6,873	*3,532	*11,653	*13,971	*5,557
Deferred maintenance and major repairs	*236,845	*233,505	*1,809	.....	*72,702	*59,002	*162,334	*174,503
Amortization of defense projects	1,257,889	556,420	493,084	215,442	229,476	130,596	535,329	210,382
Equalization	406,862	224,243	16,180	9,616	363,736	173,411	26,946	41,216
All other	106,053,274	99,420,371	47,124,575	43,336,958	20,438,007	17,282,555	38,490,692	38,800,858
Traffic	13,726,641	11,915,933	4,832,236	4,230,753	2,776,164	2,283,164	6,118,241	5,402,016
Transportation—Rail line	281,569,064	250,568,743	124,991,279	112,266,921	50,352,415	42,248,303	106,225,370	96,053,519
Miscellaneous operations	10,944,369	10,578,985	4,139,729	4,183,423	1,578,010	1,490,436	5,226,630	4,905,126
General	19,846,679	17,715,151	7,875,670	7,208,661	3,980,271	3,461,727	7,990,738	7,044,763
Railway operating expenses	538,968,438	496,031,144	228,808,057	211,148,645	102,799,154	88,970,857	207,361,227	195,911,642
Net revenue from railway operations	146,572,800	144,941,177	47,358,708	36,257,640	37,013,225	34,562,874	62,200,867	74,120,663
Railway tax accruals	75,984,883	67,599,897	26,874,466	19,514,365	18,419,857	16,293,183	30,690,560	31,792,349
Pay-roll taxes	28,485,279	19,659,433	12,070,837	8,445,969	5,331,448	3,442,290	11,082,994	7,771,174
Federal income taxes	24,631,799	26,076,541	5,562,924	2,239,145	8,554,398	8,374,118	10,514,477	15,463,278
All other taxes	22,867,805	21,863,923	9,240,705	8,829,251	4,534,011	4,476,775	9,093,089	8,557,897
Railway operating income	70,587,917	77,341,280	20,484,242	16,743,275	18,593,368	18,269,691	31,510,307	42,328,314
Equipment rents—Dr. balance	9,405,492	7,848,019	4,726,430	3,188,841	*345,829	*1,075,495	5,024,891	5,734,673
Joint facility rent—Dr. balance	3,464,677	2,846,751	1,786,318	1,535,107	486,315	385,016	1,192,044	926,628
Net railway operating income	57,717,748	66,646,510	13,971,494	12,019,327	18,452,882	18,960,170	25,293,372	35,667,013
Ratio of expenses to revenues (per cent)	78.6	77.4	82.9	85.3	73.5	72.0	76.9	72.6

* Decrease, deficit, or other reverse item.
† Railway operating revenues are after deduction of $295,909 for January 1946, to create a reserve for land grant deductions in dispute.
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

Organizations

(*Continued from page 720*)

J. Quasey, commerce counsel, National Live Stock Producers Association; second vice-president, R. M. Hitshew, freight traffic manager, Atchison, Topeka & Santa Fe; third vice-president, L. R. Cowles, traffic manager, Standard Oil Company of Indiana. Otis A. Green, western traffic manager, United States Lines and R. J. Wallace, traffic manager, Jacques Manufacturing Company, were reelected secretary and treasurer respectively. The following were elected directors to serve for a period of two years: the retiring president, R. V. Craig, general traffic manager, Allied Mills; J. H. Christy, western traffic manager, Delaware, Lackawanna & Western; R. F. Kuhlman, president, Iroquois Coal Company; and I. M. Peters, traffic manager, Corn Products Refining Company.

Meetings and Conventions

The following list gives names of secretaries, dates of next or regular meetings and places of meetings:

ALLIED RAILWAY SUPPLY ASSOCIATION. — C. F. Weil, American Brake Shoe Company, 332 S. Michigan Ave., Chicago 4, Ill. Exhibit in conjunction with meetings of the Coordinated Mechanical Associations, September 15-18, 1947, Hotel Sherman, Chicago, Ill.

AMERICAN ASSOCIATION OF BAGGAGE TRAFFIC MANAGERS.—E. P. Soebbing, 1450 Railway Exchange Bldg., St. Louis 1, Mo. Annual meeting, October 8-10, 1947, Houston, Tex.

AMERICAN ASSOCIATION OF PASSENGER TRAFFIC OFFICERS.—B. D. Branch, C. R. R. of N. J., 143 Liberty St., New York 6, N. Y.

AMERICAN ASSOCIATION OF RAILROAD SUPERINTENDENTS.—Miss Elise LaChance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual Meeting, June 5-7, 1947, Hotel Stevens, Chicago, Ill.

AMERICAN ASSOCIATION OF RAILWAY ADVERTISING AGENTS.—E. A. Abbott, 1103 Cleveland St., Evanston, Ill.

AMERICAN RAILWAY BRIDGE AND BUILDING ASSOCIATION.—Miss Elise LaChance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, September 16-18, 1947, Hotel Stevens, Chicago.

AMERICAN RAILWAY CAR INSTITUTE.—W. C. Tabbert, 19 Rector St., New York 6, N. Y.

AMERICAN RAILWAY DEVELOPMENT ASSOCIATION. —W. J. Walsh, B. & O. R. R., Baltimore 1, Md.

AMERICAN RAILWAY ENGINEERING ASSOCIATION.— Works in cooperation with the Association of American Railroads, Engineering Division.— W. S. Lacher, 59 E. Van Buren St., Chicago 5, Ill.

AMERICAN RAILWAY MAGAZINE EDITORS' ASSOCIATION.—Clifford G. Massoth, Illinois Central Magazine, 135 E. 11th Pl., Chicago 5, Ill.

AMERICAN SHORT LINE RAILROAD ASSOCIATION.— J. P. Nye, Tower Bldg., Washington 5, D. C. Annual meeting, October 16-17, 1947, Hotel New Yorker, New York, N. Y.

AMERICAN SOCIETY FOR TESTING MATERIALS.— R. J. Painter, Asst. Secretary, 1916 Race St., Philadelphia 3, Pa. Annual meeting, June 16-20, 1947, Chalfonte-Haddon Hall, Atlantic City, N. J.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS. —C. E. Davies, 29 W. 39th St., New York 18, N. Y. Annual meeting, December 1-5, 1947, Chalfonte-Haddon Hall, Atlantic City, N. J.

Railway Division.—E. L. Woodward, Railway Mechanical Engineer, 105 W. Adams St., Chicago 3, Ill. Semi-annual meeting, June 17, 1947, Chicago, Ill.

AMERICAN TRANSIT ASSOCIATION.—A. W. Baker, 292 Madison Ave., New York 17, N. Y.

AMERICAN WOOD-PRESERVERS' ASSOCIATION. — H. L. Dawson, 1427 Eye St., N. W., Washington 5, D. C. Annual meeting, April 22-24, 1947, Multnomah Hotel, Portland, Ore.

ASSOCIATED TRAFFIC CLUBS OF AMERICA, INC.— R. A. Ellison, Cincinnati Chamber of Commerce, 1203 C. of C. Bldg., Cincinnati 2, O. Annual meeting, October 6-8, 1947, Lord Baltimore Hotel, Baltimore, Md.

ASSOCIATION OF AMERICAN RAILROAD DINING CAR OFFICERS.—H. S. Whited, 5th & T Sts., N. E., Washington 2, D. C.

ASSOCIATION OF AMERICAN RAILROADS. — H. J. Forster, Transportation Bldg., Washington 6, D. C.

Operations and Maintenance Department.— J. H. Aydelott, Vice-President, Transportation Bldg., Washington 6, D. C.

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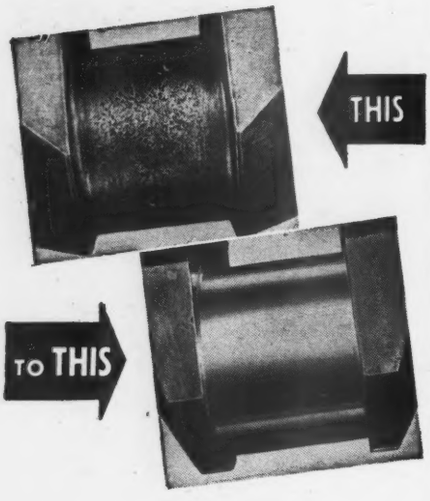

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Operating-Transportation Division. — L. R. Knott, 59 E. Van Buren St., Chicago 5, Ill.

Operating Section.—J. C. Caviston, 30 Vesey St., New York 7, N. Y.

Transportation Section.—H. A. Eaton, 59 E. Van Buren St., Chicago 5, Ill.

Communications Section.—W. A. Fairbanks, 30 Vesey St., New York 7, N. Y.

Fire Protection and Insurance Section.—W. F. Steffens, New York Central, Room 3317, 230 Park Avenue, New York 17, N. Y.

Freight Station Section.—W. E. Todd, 59 E. Van Buren St., Chicago 5, Ill.

Medical and Surgical Section.—J. C. Caviston, 30 Vesey St., New York 7, N. Y. Annual meeting, June 9, 1947, Madison Hotel, Atlantic City, N. J.

Protective Section.—J. C. Caviston, 30 Vesey St., New York 7, N. Y. Annual meeting, June 17-19, 1947, Hotel Statler, Detroit, Mich.

Safety Section. — J. C. Caviston, 30 Vesey St., New York 7, N. Y. Annual meeting, May 8-10, 1947, Statler Hotel, Cleveland, O.

Engineering Division.—W. S. Lacher, 59 E. Van Buren St., Chicago 5, Ill.

Construction and Maintenance Section.—W. S. Lacher, 59 E. Van Buren St., Chicago 5, Ill.

Electrical Section.—W. S. Lacher, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, September 30, 1947, Hotel Sherman, Chicago, Ill.

Signal Section.—R. H. C. Balliet, 30 Vesey St., New York 7, N. Y. Annual meeting, September 11-13, 1947, Edgewater Beach Hotel, Chicago, Ill.

Mechanical Division.—Arthur C. Browning, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, June 23-28, 1947, Convention Hall, Atlantic City, N. J.

Electrical Section.—J. A. Andreucetti, 59 E. Van Buren St., Chicago 5, Ill.

Purchases and Stores Division.—W. J. Farrell (Executive Vice-Chairman), Transportation Bldg., Washington 6, D. C. Annual meeting, June 23-25, 1947, Convention Hall, Atlantic City, N. J.

Freight Claim Division.—Lewis Pilcher, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, April 15-17, 1947, Hotel Statler, St. Louis, Mo.

Motor Transport Division. — George M. Campbell, Transportation Bldg., Washington 6, D. C.

Car Service Division.—W. C. Kendall, Chairman, Transportation Bldg., Washington 6, D. C.

Finance, Accounting, Taxation and Valuation Department.—E. H. Bunnell, Vice-President, Transportation Bldg., Washington 6, D. C.

Accounting Division.—E. R. Ford, Transportation Bldg., Washington 6, D. C. Annual meeting, May 20-23, 1947, Roney Plaza Hotel, Miami, Fla.

Treasury Division.—E. R. Ford, Transportation Bldg., Washington 6, D. C. Annual meeting, October 8-10, 1947, New Ocean House, Swampscott, Mass.

Traffic Department.—A. F. Cleveland, Vice-President, Transportation Bldg., Washington 6, D. C.

ASSOCIATION OF RAILWAY CLAIM AGENTS.—F. L. Johnson, Alton R. R., 340 W. Harrison St., Chicago 7, Ill. Annual meeting, May 7-9, 1947, Hotel Ambassador, Atlantic City, N. J.

BRIDGE AND BUILDING SUPPLY MEN'S ASSOCIATION.—E. C. Gunther, Duff-Norton Mfg. Co., 122 S. Michigan Ave., Chicago 3, Ill. Exhibit in conjunction with American Railway Bridge and Building Association Convention, September 15-18, 1947, Hotel Stevens, Chicago, Ill.

CANADIAN RAILWAY CLUB.—C. R. Crook, 4415 Marcil Ave., N. D. G., Montreal 28, Que. Regular meetings second Monday of each month, except June, July and August, Mount Royal Hotel, Montreal, Que.

CAR DEPARTMENT ASSOCIATION OF ST. LOUIS.—J. J. Sheehan, 1101 Missouri Pacific Bldg., St. Louis 3, Mo. Regular meetings, third Tuesday of each month, except June, July and August, Hotel De Soto, St. Louis, Mo.

CAR DEPARTMENT OFFICERS' ASSOCIATION.—F. H. Stremmel, 6536 Oxford Ave., Chicago 31, Ill. Annual meeting, September 15-18, 1947, Hotel Sherman, Chicago, Ill.

CAR FOREMEN'S ASSOCIATION OF CHICAGO.—W. E. Angier, chief A. A. R. clerk, C. B. & Q. R. R., 547 W. Jackson Blvd., Chicago 6, Ill. Regular meetings, second Monday of each month, except June, July and August.

CENTRAL RAILWAY CLUB OF BUFFALO. — R. E. Mann, 1840-42 Hotel Statler, McKinley Square, Buffalo 5, N. Y. Regular meetings, second Thursday of each month, except June, July and August, Hotel Statler, Buffalo, N. Y.

CHICAGO LUNCHEON CLUB OF MILITARY RAILWAY SERVICE VETERANS — Col. R. O. Jensen, Schiller Park, Ill. Luncheon, second Wednesday of each month, Chicago Traffic Club, Palmer House, Chicago, Ill.

EASTERN ASSOCIATION OF CAR SERVICE OFFICERS.—H. J. Hawthorne, Union Railroad, East Pittsburgh, Pa.

EASTERN CAR FOREMAN'S ASSOCIATION.—W. P. Dizard, 30 Church St., New York 7, N. Y. Regular meetings, second Friday of January, February (Annual Dinner), March, April, May, October and November, 29 W. 39th St., New York, N. Y.

LOCOMOTIVE MAINTENANCE OFFICERS' ASSOCIATION.—C. M. Lipscomb, 1721 Parker Street, North Little Rock, Ark. Annual meeting, September 15-18, 1947, Hotel Sherman, Chicago, Ill.

MASTER BOILER MAKERS' ASSOCIATION — A. F. Stiglmeier, 29 Parkwood St., Albany 3, N. Y. Annual meeting September 15-18, 1947, Hotel Sherman, Chicago, Ill.

NATIONAL ASSOCIATION OF RAILROAD AND UTILITIES COMMISSIONERS.—Ben Smart, 7413 New Post Office Bldg., Washington 25, D. C. Annual meeting, July 14-18, 1947, Boston, Mass.

NATIONAL ASSOCIATION OF SHIPPERS' ADVISORY BOARDS.—F. J. Armstrong, U. S. Radiator Company, Detroit, Mich.

NATIONAL INDUSTRIAL TRAFFIC LEAGUE.—Edward F. Lacey, Suite 450, Munsey Bldg., Washington 4, D. C.

NATIONAL RAILWAY APPLIANCES ASSOCIATION. — C. H. White, Room 1826, 208 S. La Salle St., Chicago 4, Ill.

NEW ENGLAND RAILROAD CLUB.—W. E. Cade, Jr., 683 Atlantic Ave., Boston 11, Mass. Regular meetings, second Tuesday of each month, except June, July, August and September, Hotel Vendome, Boston, Mass.

NEW YORK RAILROAD CLUB. — D. W. Pye, 30 Church St., New York 7, N. Y. Regular meetings, third Thursday of each month, except June, July, August, September and December, 29 W. 39th St., New York, N. Y.

NORTHWEST CARMEN'S ASSOCIATION. — E. N. Myers, Minnesota Transfer Ry., 1434 Iowa Ave., St. Paul 4, Minn. Regular meetings, first Monday of each month, except June, July and August, Midway Club, 1931 University Ave., St. Paul, Minn.

PACIFIC RAILWAY CLUB. — William S. Wollner, P. O. Box 458, San Rafael, Cal. Regular meetings, second Thursday of each alternate month at Palace Hotel, San Francisco, Cal., and Hotel Biltmore, Los Angeles, Calif.

RAILWAY BUSINESS ASSOCIATION.—P. H. Middleton, First National Bank Bldg., Chicago 3, Illinois.

RAILWAY CLUB OF PITTSBURGH.—J. D. Conway, 308 Keenan Bldg., Pittsburgh, Pa. Regular meetings, fourth Thursday of each month, except June, July and August, Fort Pitt Hotel, Pittsburgh, Pa.

RAILWAY ELECTRIC SUPPLY MANUFACTURERS' ASSOCIATION.—J. McC. Price, Allen-Bradley Company, 624 W. Adams St., Chicago 6, Ill.

RAILWAY FUEL AND TRAVELING ENGINEERS' ASSOCIATION.—T. Duff Smith, Room 811, Utilities Bldg., 327 S. La Salle St., Chicago 4, Ill. Annual meeting, September 15-18, 1947, Hotel Sherman, Chicago, Ill.

RAILWAY SUPPLY MANUFACTURERS' ASSOCIATION.—A. W. Brown, Room 1424, 30 Church St., New York 7, N. Y. Exhibit in conjunction with meetings of A. A. R. Mechanical Division and Purchases and Stores Division, June 23-28, 1947, Convention Hall, Atlantic City, N. J.

RAILWAY TELEGRAPH AND TELEPHONE APPLIANCE ASSOCIATION.—G. A. Nelson, Waterbury Battery Company, 30 Church St., New York 7, N. Y. Meets with Communications Section, of A. A. R.

RAILWAY TIE ASSOCIATION.—Roy M. Edmonds, 610 Shell Bldg., St. Louis 3, Mo. Annual meeting, September 23-25, 1947, Arlington Hotel, Hot Springs, Ark.

ROADMASTERS' AND MAINTENANCE OF WAY ASSOCIATION.—Miss Elsie LaChance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, September 16-18, 1947, Hotel Stevens, Chicago, Ill.

SIGNAL APPLIANCE ASSOCIATION.—G. A. Nelson, Waterbury Battery Company, 30 Church St., New York 7, N. Y. Meets with A. A. R. Signal Section.

SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.—A. T. Miller, 4 Hunter St., S. E., Atlanta, Ga. Regular meetings, third Thursday in January, March, May, July, September and November, Ansley Hotel, Atlanta, Ga.

SOUTHERN ASSOCIATION OF CAR SERVICE OFFICERS.—D. W. Brantley, C. of Ga., Savannah, Ga.

TORONTO RAILWAY CLUB.—D. M. George, P. O. Box 8, Terminal "A," Toronto 2, Ont. Regular meetings, fourth Monday of each month, except June, July and August, Royal York Hotel, Toronto, Ont.

TRACK SUPPLY ASSOCIATION.—Lewis Thomas, Q. and C. Company, 59 E. Van Buren St., Chicago 5, Ill. Exhibit in conjunction with Roadmasters' and Maintenance of Way Association Convention, September 15-18, 1947, Hotel Stevens, Chicago, Ill. ●

UNITED ASSOCIATIONS OF RAILROAD VETERANS.—Roy E. Collins, 225 Bidwell Ave., Westerleigh, Staten Island 2, N. Y.

WESTERN RAILWAY CLUB.—E. E. Thulin, Suite 339, Hotel Sherman, Chicago, Ill., Regular meetings, third Monday of each month, except January, June, July, August and September, Hotel Sherman, Chicago, Ill.